Joint Logistics (Distribution)
Joint Integrating Concept

Version 1.0

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The Joint Staff
Washington, DC 20318-4000

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Executive Summary

This paper complements the ideas expressed in the Focused Logistics Joint Functional Concept. In particular, two challenge areas from this over-arching functional concept are specifically addressed in this paper – joint deployment/rapid distribution and agile sustainment. These two pivotal challenge areas touch literally every facet of joint logistics and are well suited for coverage in this first of a series of logistics joint integrating concepts.

This paper provides a conceptual foundation for future capability development activities to support *joint distribution operations* envisioned to be conducted in the 2015-2025 timeframe. The paper contains sufficient detail to initiate a Capabilities-Based Assessment in support of the Joint Capabilities Integration and Development System. This concept outlines key tasks, conditions, standards, and a supporting concept of operations that, collectively, provide a basis for determining potential future joint distribution capability gaps and excesses.

This joint integrating concept calls for a joint deployment and distribution enterprise (JDDE) capable of providing prospective joint force commanders (JFCs) with the ability to rapidly and effectively move and sustain joint forces in support of major combat operations or other joint operations. This enterprise – an integrated system consisting of assets, materiel, personnel, leaders, organizations, procedures, tools, training, facilities, and doctrine – will provide logistics solutions to the JFC to minimize seams in the pipeline that characterize current strategic and theater distribution segments. The JDDE will complement, interact with and augment Service or JFC-unique distribution responsibilities and capabilities.

The central idea of this concept is summarized in the following hypothesis:
If we can:

- Build a single unified JDDE capable of rapidly delivering and positioning joint forces and sustainment from any origin or supply source to any JFC designated point of need and back again; and
- Augment any JFC with additional, ready, scalable, and agile distribution capabilities; and
- Network the entire system in near real-time with common operational views and shared knowledge, intuitive decision-support and modeling tools, and asset visibility.

Then the results will be:

- Enhanced delivery of forces and sustainment to the JFC, enabling, not limiting, operational art and employment of forces; and
- Rapid introduction and integration of additional theater distribution capabilities to seamlessly link the joint force with the entire distribution system; and
- Improved trust and confidence that the entire distribution system will "deliver."

The figure below depicts the end-to-end JDDE described in this paper's central and supporting ideas.

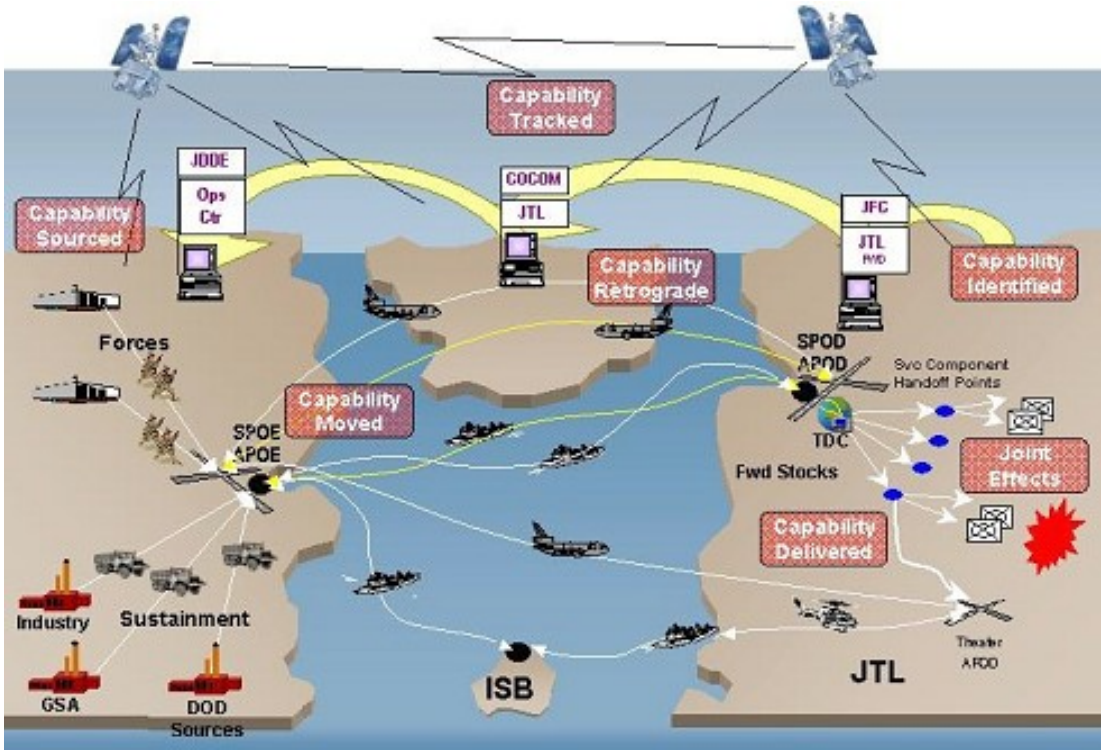

Figure 1: Joint Deployment and Distribution Enterprise (JDDE) Overview

Supporting ideas to this concept are described in the context of three essential tasks that are associated with the JDDE cited in the central idea. The first two tasks focus on operational activities the enterprise performs for the JFC to achieve desired effects or accomplish stated operational objectives. The third task describes essential activities the enterprise must accomplish to enable performance of the first two tasks. Appendix C to this concept outlines the

essential and supporting tasks associated with the JDDE and details linking conditions and standards.

On 20 October 2005, the JROC tasked the sponsors of this integrating concept to posit a solution for control of the enterprise. Specifically, the requirement was to define enterprise composition, address enterprise relationships, and describe control. Appendix F was written in response to this tasking, and it provides a baseline against which other potential solutions could be evaluated during the Functional Solutions Analysis (FSA) of the Capabilities Based Assessment (CBA). It is understood this is a departure from established guidelines governing development of joint integrating concepts, with respect to the identification and articulation of specific solutions.

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"A joint force capable of full spectrum dominance must possess unmatched speed and agility in positioning and repositioning tailored force capabilities from widely dispersed locations to achieve operational objectives quickly and decisively"

DOD Logistics Transformation Roadmap – Sep 04

Section 1 – PURPOSE

The primary purpose of this concept is to support rigorous assessment and analysis of capability gaps and excesses through a Capabilities-Based Assessment (CBA) process in order to reach appropriate materiel and non-materiel solutions as part of the broader Department of Defense (DOD) Joint Capabilities Integration and Development System (JCIDS) effort. As the basis for performing this assessment, this concept will suggest a set of capabilities and corresponding tasks, conditions and standards that will potentially guide how a future JFC will integrate joint distribution activities into an overall campaign to enhance the conduct of joint operations. In addition, this concept is intended to help drive joint, Service, and multinational experimentation, and to influence science and technology efforts. When potential solutions are identified through the CBA, this concept will also inform the efforts of combatant commanders and others to improve current joint distribution capabilities.

Section 2 – SCOPE

2.1 Scope

This concept paper describes a future, end-to-end JDDE and how the operation of that enterprise could enhance – rather than limit – the conduct of joint campaigns across the range of military operations in the period of 2015-2025. The mission of this future JDDE is to plan, synchronize, execute, and assess global joint distribution operations in support of JFCs. Joint distribution operations, as described in the context of this paper, provide for the movement or delivery of joint forces and sustainment from points of origin to points of need.

Because joint distribution operations have often competed for limited resources (e.g. insufficient sustainment commodities, lift assets, supply priorities, congestion, etc), the traditional way to deal with this competition has been through "de-confliction". One of the purposes of this integrating concept is to eliminate resource competition among force movements, materiel distribution, and sustainment requirements.

This concept also reflects application of capabilities described in the family of emerging joint operations concepts, with particular emphasis on critical elements of two capability areas described in the Focused Logistics Joint Functional Concept - these two capability areas are "joint deployment/rapid distribution" and "agile sustainment."

Joint distribution operations are a subset of the larger field of joint logistics. Joint logistics includes other areas such as acquisition and procurement; material maintenance, disposition/disposal/salvage of materiel; the construction, contracting, maintenance, operation, and disposition of facilities; health service support; civil and operational engineering; and the acquisition or furnishing of services (mortuary affairs, postal, disbursing, graves registration, etc.) and the necessary force protection to provide security for these functions. This concept does not explicitly address these other logistics areas. Clearly, however, joint distribution operations serve or enable these other logistic areas and provide a basis for them to be integrated into the JFC's overall concept for logistics support. It should follow from this discussion that the future JDDE, as introduced above, would be an integral part of a larger, more encompassing joint logistics enterprise. Follow-on joint concepts should address this larger logistics enterprise.

Deployment, distribution, and sustainment capabilities are not the exclusive domain of joint logistics – these critical capabilities are also components of other broader operational processes, such as joint force projection. Joint force projection operations, for example, include the activities of mobilization, deployment, employment, sustainment, and redeployment. While joint distribution operations include many similar tasks within the broader capability areas of deployment and sustainment, and other larger processes such as force projection operations, these terms should not be viewed to be synonymous. The point to be made here is that joint distribution operations are only one facet, albeit critical, of these over-arching processes and

capabilities. It should also be noted that the term deployment is used in the naming convention of the enterprise, similar to the present-day Surface Deployment and Distribution Command (a component command to United States Transportation Command), to ensure the reader appreciates the breadth of joint force movement activities to be accomplished, not to suggest that the enterprise will execute all functions of deployment.

Joint distribution operations support or enable the mobilization process by assisting the Services and JFCs in assembling or moving national resources to support national objectives. The portion of deployment that falls within the function of distribution is the movement of forces and materiel to desired operational areas. It encompasses all movement activities from origin or home station through destination, specifically including intra-continental United States, inter-theater, theater reception, intra-theater movement legs, and assembly areas. It also includes global/intra-theater casualty and patient movement operations and support to non-combatant evacuation operations. Deployment implies the initial movement to or within the theater and may accomplish strategic or operational maneuver. In the context of this concept, distribution does not include those aspects of the deployment process involving decisions about self-deploying units, force readiness assessment, what units to deploy (sourcing), and priority of their deployment to satisfy JFC operational requirements.

As joint forces complete their deployment into the theater of operations they may be subsequently directed to conduct additional administrative or operational movements within the theater in order to be repositioned for follow-on missions. If these forces do not possess sufficient organic mobility assets to move themselves, then the JFC may employ common-user, intra-theater lift capabilities - theater movements of this nature are envisioned to be a key responsibility of the JDDE and, as such, are covered in this concept.

This concept also addresses sustainment as a key task of the JDDE. The timely and effective delivery (and return) of supplies, equipment, and services to the joint force requires a lean and agile supply chain. Joint distribution operations are inextricably linked to DOD's global supply chain. Supply chain operations include materiel planning, sourcing, making, delivering, and return process activities. As in the case of joint logistics stated above, joint distribution

operations directly support or influence supply chain planning, sourcing, making, and return activities. The JDDE accomplishes the delivery function in support of DOD's global supply chain operations. The supply chain must strike an optimal balance regarding inventory levels, the positioning of stocks, and the robust capabilities of a distribution pipeline that moves those stocks to and from the theater. It must also have the ability to expand to meet surge requirements or to support distributed forces in an anti-access environment. Finally, the supply chain must also coordinate sustainment distribution services among U.S. forces and host nation support (HNS), interagency (IA), multi-national partners (MN), non-government organizations (NGO) and contractors. This concept envisions a logistics system that is enabled by information technology advancements and superior distribution systems, with the capability to dynamically manage inventory flow within the pipeline to satisfy operational flexibility of the joint force and strike a proper balance between stock positioning and increased agile management of stock in the pipeline flow.

As stated above, joint distribution operations consist of moving forces and materiel from points of origin and sources of supply to final destinations or points of need with precision and velocity. A point of need is designated by the JFC. It can be a major strategic aerial or seaport of debarkation (A/SPOD), an austere airfield, a sea base, or any forward location within the battlespace (e.g., open fields, parking lots, highway segments, etc.). With real-time asset visibility, customers will be able to coordinate with the JDDE to influence the final destination that best meets their requirements. Current doctrine describes the joint distribution pipeline as being composed of two distinct segments. The first is the strategic segment that extends from the point of origin or sources of supply to a supported theater. This segment supports two related functions: (1) traditional distribution functions currently performed primarily by the Defense Logistics Agency and the Services, and (2) transportation functions performed by U.S. Transportation Command. The second segment is the theater segment that extends from the theater debarkation points to the final destinations or points of need within the theater. Operation of the in-theater portion of the joint distribution pipeline is currently the responsibility of the supported combatant commander. This concept addresses both of the segments described above, but does so within the context of a single, integrated joint enterprise that possesses sufficient authority to exercise selective control across the entire distribution pipeline. Control over the

distribution pipeline means the ability to track and shift – and potentially reconfigure (per supported commander's intent) – forces, equipment, and supplies, even while en route, and to deliver tailored logistics packages and sustainment directly to the warfighter. Control also includes activities such as planning, apportioning, allocating, routing, scheduling, validation of priorities, and directing – functions, for example, typically associated with movement control entities.

This concept will discuss future joint distribution operations with particular emphasis on the challenges of rapidly and effectively integrating distribution capabilities during the early stages of a major combat operation. During the "seize the initiative" portion of a major combat operation the JFC must not only rapidly close, reposition or maneuver, and employ joint forces, but must also set conditions for immediate integration of follow-on sustainment of personnel, equipment, and supplies, and the reconstitution of these forces to re-engage the fight within the joint operations area (JOA), or elsewhere. Joint distribution operations must be planned, integrated, and executed across the strategic, operational, and tactical continuum – this end-to-end perspective is also part of this concept's scope.

2.2 Terms and Definitions

This concept paper uses a variety of distribution-related terms in a context that may be different from the multitude of logistics definitions found in current doctrine and literature. To the maximum extent possible, this paper will use terms that match those found in Joint Publication 1-02, Department of Defense (DOD) Dictionary of Military and Associated Terms. New terms will be explained within the text or glossary of this document.

Today, there is separate doctrine covering deployment, distribution, and sustainment operations, suggesting that these functions, although related, are sufficiently different to merit distinct treatment. For the purpose of this concept, these functions are aligned under the activity entitled ***joint distribution operations***. Joint distribution operations are the collective activities necessary to plan, synchronize, and execute movement and sustainment tasks in support of military operations. These operations are served by a ***JDDE***. The JDDE is that complex of equipment, procedures, doctrine, leaders, technical connectivity, information, shared knowledge,

organizations, facilities, training, and materiel necessary to conduct joint distribution operations. An effective enterprise draws its inherent strength from the synergy generated through its physical, information, financial, and communication networks that are designed and maintained to be mutually supportive. The ***joint distribution pipeline*** not only provides the means for the physical two-way flow of personnel, equipment, supplies, and service across the strategic, operational, and tactical continuum; but also provides for the attendant flow of information, funds, and communications in support of joint distribution operations.

2.3 Timeframe

This concept has been written to address the 2015-2025 timeframe.

2.4 Strategic Guidance

This concept supports the priorities of the CJCS, the objectives of the National Military Strategy and the spirit and intent of DOD strategic guidance. It also complements the applicable priorities, principles, objectives, attributes, and capabilities described in DOD strategic guidance documents. There is no divergence from this guidance in this concept.

2.5 Future Context Documents

This paper complements the concepts, capabilities, and ideas expressed in supporting future context documents such as the joint capstone concept, joint operating concepts, joint functional concepts, and other joint integrating concepts.

2.6 Applicable Military Operations

Joint distribution operations discussed in this concept are generally applicable across the range of military operations. Particular emphasis, however, is placed on distribution challenges in support of the seize-the-initiative and decisive operations portion of a major combat operation.

2.7 Assumptions

Assumptions are defined as starting conditions beyond the purview of this concept, but upon which this concept depends.

- The United States will invest in, and develop, network-centric capabilities and communication infrastructure supportive of war fighter requirements and future joint distribution operations needs.
- The enterprise will be required to adapt to changing conditions of access to, and along, LOCs.
- Partnership with civilian transportation and sustainment industries will continue.
- The United States will invest in the joint seabasing concept and seabasing capabilities supportive of war fighter requirements and future joint deployment and distribution operations needs.

Section 3 – CENTRAL IDEA AND SUPPORTING IDEAS

3.1 The Future Environment

The strategic landscape of the 21st Century poses unprecedented threats, widespread challenges, and compressed decision timelines for influencing events worldwide. Weapons of mass destruction, conventional and unconventional warfare, global terrorism, and reduced access to overseas infrastructure will affect future joint force operations. While traditional adversary force structures remain an enduring danger and merit continued improvement of our current warfighting capabilities, new asymmetric threats demand a re-examination of our emerging operational concepts for achieving full spectrum dominance.[1] This future environment has significant implications for the conduct of joint distribution operations in the 2015-2025 timeframe.

Three key aspects of the future security environment will pose an array of military challenges that will influence the conduct of joint distribution: (1) a wider range of adversaries, (2) a more

[1] Strategic Planning Guidance, 2004.

complex and diverse battle space, and (3) technology diffusion and access.[2] Key security environment challenges and corresponding implications on joint distribution operations are discussed below.

- Future operations may require "seizing the initiative" early, followed by rapid decisive operations.
    - Requires rapid closure of joint expeditionary forces, from strategic and/or operational distances, ready for immediate employment.
    - Necessitates rapid integration and employment of a variety of basing solutions, which could include pre-positioned, forward-based and/or sea based joint capabilities.
    - Requires forces to close to the theater with sufficient accompanying supplies.
    - Requires standing capabilities to facilitate the rapid establishment of deployment and distribution capabilities within a theater lacking adequate infrastructure.
- Smaller, but highly dispersed enemy forces operating in complex, non-contiguous terrain and anti-access environments.[3]
    - May require multiple joint force entry points separated by greater distances.
    - Suggests an examination of the number and mix of current mobility platforms.
    - Requires a greater degree of flexibility and interoperability of the JDDE.
    - Requires the enterprise to have the ability to selectively offload the right combat capability for the threat.
    - May require greater operational reach of mobility platforms because lines of communication for mobility and sustainment operations are longer.
    - May require the enterprise to support the repositioning and operational maneuver of joint forces to conduct distributed operations against a highly dispersed enemy in a non-linear, non-contiguous environment.
    - May require establishment and maintenance of tailorable and scalable capabilities across the theater.
- Immature theaters lacking robust debarkation ports (bases) and infrastructure
    - May result in low cargo throughput.

[2] National Military Strategy of the United States of America, 2004, pg. 4.
[3] Non-linear/non-contiguous battlespace render ground lines of communication more vulnerable to interdiction, resulting in increased reliance on air and sea delivery platforms.

    - Impacts capacity of the joint distribution pipeline.
    - Requires a robust and adaptable expeditionary JDDE.
    - Requires rapid establishment of infrastructure from modular packages.
- Likely attacks across the joint distribution pipeline.
    - May affect the ability to provide assurance of time-definite distribution.
    - May require the re-balancing of the efficiency versus effectiveness equation regarding positioning of mobility and sustainment assets and stocks.
    - May require indemnification of selected distribution carriers and contractors to ensure adequate participation and dependable support.
- Simultaneous operations in multiple theaters.
    - Requires an agile, integrated global deployment and distribution system.
    - Requires adoption of a more effective, simplified movement/demand priority system.
    - Requires more robust decision-support and modeling/simulation tools to balance allocation and apportionment of assets within the enterprise.
- Reduced access to secure, U.S.-controlled overseas installations.
    - Places greater emphasis on seabasing and afloat prepositioning capabilities.
    - May lengthen distribution lines of communications.
    - May require the delivery of forces directly to the point of need, bypassing traditional strategic ports and airfields.
- Increased likelihood for network-attack, intrusion, and disruption.
    - Requires the enterprise to utilize simplified processes that are not entirely technology dependent.
    - Drives the need for continuous determination of threat impact and increased protection measures.
    - Requires networking system to have sufficient protections to gracefully degrade without catastrophic failures.
    - Requires backup capabilities if the system fails or is interdicted.

3.2 The Military Problem

In the varied and highly uncertain future security environment that we expect, DOD will be challenged to deliver an integrated, networked, end-to-end deployment and distribution capability that possesses the right capacity, scalability, agility, control, force projection, and time-assurance qualities to effectively support JFCs' ability to project the appropriate level of combat power.[4] Additionally, our current joint distribution system is comprised of distinct segments – strategic and theater. Though our strategic distribution segment possesses robust capabilities and is undergoing significant process improvement and reform, it is not fully integrated with operational and tactical-level distribution activities at the theater level. Clearly, the operational and tactical distribution function has not enjoyed the level of advocacy as the strategic segment. As such, the capabilities of the theater distribution segment fall short of what is required to integrate into a comprehensive end-to-end distribution pipeline.

Key indicators of the overall problem are as follows:

- Lack of full integration between processes that deploy and sustain the joint force.
- Separate DOD systems and doctrine exist for both deployment and distribution.
- Lack of an integrated, net-centric environment, capable of supporting the control needed to accommodate E2E distribution activities.
- Limited direct "fort-to-fight" force deployment capabilities.
- Inability to deliver joint forces fast enough across inter-theater lines of communication per the 10-30-30 construct.
- Limited and intermittent asset visibility and in-transit visibility of forces and commodities in the distribution pipeline.
- Intra-theater lift challenged to accommodate demands of increasingly more simultaneous, distributed, and non-contiguous operations.
- Poor retrograde management and return within the distribution pipeline.
- Inadequate decision-support and modeling & simulation tools.
- Insufficient commonality in force data elements.
- Limited shared common operational picture.

[4] *DOD Logistics Transformation: The Future Logistics Enterprise,* 8 Apr 2003, Briefing by Mr. A.E. Estevez, Assistant Deputy Under Secretary of Defense at the Supply Chain World Conference and Exposition.

- Poor integration with multi-national, inter-agency organizations, non-government organizations and civilian contractors (e.g., Logistics Civil Augmentation Program (LOGCAP)).
- Vulnerability of the entire distribution pipeline to attack.
- Rigid, cumbersome financial processes.
- Lack of standardized rules, tools and processes to enhance joint distribution operations.

The above indicators speak to the many shortfalls that sharply hinder immediate employment of joint forces in simultaneous, distributed operations.

3.3 The Central Idea

This concept calls for a JDDE capable of providing prospective JFCs with the ability to rapidly and effectively move and sustain selected joint forces in support of major combat operations or other joint operations. The JDDE must be capable of operating across the strategic, operational, and tactical continuum with a set of integrated, robust, and responsive physical, information, communication, and financial networks. It must be able to rapidly establish and maintain infrastructure whenever and wherever it is needed. This concept directly supports the three over-arching distribution imperatives cited in the Focused Logistics Joint Functional Concept, namely the requirement to: build the right capacity into the joint distribution pipeline; exercise sufficient control over the pipeline; and provide a high degree of assurance that right forces, equipment, sustainment, and support will arrive when and where needed.

Future JFCs will rely upon the supporting JDDE to quickly expand existing peacetime distribution networks with a full range of standing, scalable, and expeditionary distribution capabilities to perform their movement and sustainment responsibilities. The JDDE – an integrated system consisting of assets, materiel, personnel, leaders, organizations, procedures, tools, training, facilities, and doctrine – will provide logistic solutions to the JFC to minimize the seams in the pipeline that characterize current strategic and theater distribution segments. At the tactical level, the enterprise will complement, interact with, and augment Service-unique, supporting combatant command, or theater-assigned distribution capabilities and responsibilities – similar in a fashion, for example, to the way present-day Military Sealift Command capabilities support fleet combat logistics force (CLF) operations.

It is envisioned that members of the JDDE will include organizations and partnerships from the military Services; combatant commands and joint task forces; other government agencies; and the private sector to include profit and non-profit entities. To function on a global scale and to provide comprehensive, end-to-end distribution capabilities, enterprise membership will be drawn from the current-day Defense Transportation System (DTS); DOD supply chain to include selective elements of the Services, Defense Logistics Agency, and supporting commercial providers; and other external multi-national partners. Enterprise participants will operate across the strategic, operational, and tactical continuum - many participants will be affiliated with either supported or supporting commands, and they will operate under a variety of command relationships. Commercial partners will play a vital role in virtually all aspects of the enterprise. While this concept does not prescribe specific organizational constructs for the operation of the enterprise, it does recognize the potential desirability and importance of vesting a single entity with accountability and authority to coordinate, integrate, and synchronize the development, employment, and assessment of a future JDDE that possesses scalable, agile, global, and end-to-end capabilities. This concept envisions the attainment of a scalable joint capability that serves to enhance the coordination, integration, and synchronization of logistics in order to produce an operational effect resulting in increased force employment opportunities and alternatives.

The central idea of this concept, then, is summarized in the following hypothesis.
If we can:

- Build a single unified JDDE capable of rapidly delivering and positioning joint forces and sustainment from any origin or supply source to any JFC designated point of need and back again; and
- Augment any JFC with additional, ready, scalable, and agile distribution capabilities, and
- Network the entire system in near real-time with common operational views and shared knowledge, intuitive decision-support and modeling tools, and asset visibility.

Then the results will be:

- Enhanced delivery of forces and sustainment to the JFC enabling, not limiting, operational art and employment of forces; and
- Rapid introduction and integration of additional theater distribution capabilities to seamlessly link the joint force with the entire distribution system; and
- Improved trust and confidence that the entire distribution system will "deliver".

If the future JDDE is to realize the vision outlined above, it must establish performance goals or standards that are quantifiable as well as challenging and attainable. Towards this end, this paper has outlined (see Appendix C) a comprehensive set of tasks, conditions, and standards that, if realized, will enable the enterprise to accomplish future mission requirements. In essence, these detailed performance goals, viewed collectively, are as much a part of the central idea as the main points listed in the preceding two paragraphs.

Below are illustrative examples of key tasks associated with challenging, yet attainable, performance metrics and standards for the conduct of future JDDE operations.

- Task: *Strategically move the joint force.* Metric/Standard: 80% of required forces are delivered with 15 days of supply by the JFC's required delivery date in immediately employable configuration.
- Task: *Deliver supplies to the point of need.* Metric/Standard: Emergency re-supply will be met within a customer wait time of 6 hours with a reliability of 97% and an accuracy level of 95% to multiple customers.
- Task: *Control the enterprise.* Metric/Standard: 100% of the logistics data is common to all JDDE participants and 100% of the joint force has complete asset visibility.

3.4 Supporting Ideas

Supporting ideas to this concept are described below in the context of three essential tasks that are associated with the JDDE cited in the central idea. The first two tasks focus on activities the enterprise performs for the JFC to achieve desired effects or accomplish stated operational objectives. The third task describes the essential activities the JDDE must accomplish to enable

performance of the first two tasks. Appendix C to this concept outlines the essential and supporting tasks associated with the JDDE and details linking conditions, metrics and standards.

Following are the essential tasks of the JDDE and corresponding ideas that, collectively, complement the central idea of this concept:

- **Move the Joint Force**
    - Rapidly deploy modular, scalable joint force warfighting capabilities, with sufficient accompanying supplies and theater opening capabilities/ basing options, across strategic and operational distances via high-speed mobility and maneuver platforms, enabling entire combat-ready units to arrive in theater within hours or days, not weeks, in accordance with the 10-30-30 construct.
    - Accomplish the closure of early-deploying, expeditionary joint forces across strategic and theater movement segments in a single movement from their point of origin to a point designated by the JFC and bypassing, if necessary, traditional ports of debarkation, enabling units to move to points of need for prompt operational employment in support of "seizing the initiative."
    - Close the gap between entry forces and immediate follow-on forces deploying by air and sea to achieve a deployment momentum that rapidly expands initial entry operations and builds combat power sufficiently to seize the initiative quickly, achieve and maintain force dominance, and ultimately overwhelm the adversary throughout the JOA.
    - Adopt new strategies to leverage and integrate the expanding role of commercial distribution providers in enterprise activities, especially during early force closure activities.
    - Conduct global/intra-theater casualty and patient movement operations.
    - Support non-combatant evacuation operations (NEO).
    - Support the intra-theater movement of joint forces from/to all nodes via multi-modal platforms and enable reception and assembly operations as required.
    - Support theater refueling operations per JFC requirements.
    - Provide/augment theater movement control capabilities to enhance surface, air, and afloat distribution activities.

- Build the necessary control in the joint distribution pipeline to track, shift, and potentially reconfigure forces, equipment, supplies, and support, even while en-route, in order to avoid pipeline nodes and links that are congested, threatened, damaged, or under attack.
- Leverage the sea base as one possible location to perform joint force arrival, assembly, and selective offload distribution functions, especially in theaters lacking robust ashore ports of debarkation, or to overcome an anti-access environment.
- Configure and deploy modular, scalable joint forces in a manner that minimizes the requirement for time-intensive theater joint reception, staging, onward movement, and integration (JRSOI) activities.
- Employ “high-speed connectors” to allow afloat/ashore forward-based assets to be rapidly replenished and to cross-level on a ship-to-ship, or ship-to-shore, or port-to-port basis to support operations within the JOA.
- Provide available support to the JFC for reconstitution of joint force capability following operations.
- Support recovery of personnel, equipment and supplies enabling reconstitution of joint forces in the JOA/theater.
- Conduct movement required to replace or cross-level personnel, and reposition equipment for repair, replacement, or reallocation.
- Build enough forward and reverse velocity into the retrograde pipeline to accommodate the return of forces, and the system components and carcasses requiring maintenance to minimize the need for an extensive in-theater maintenance footprint.

Figure 2 graphically depicts this key task.

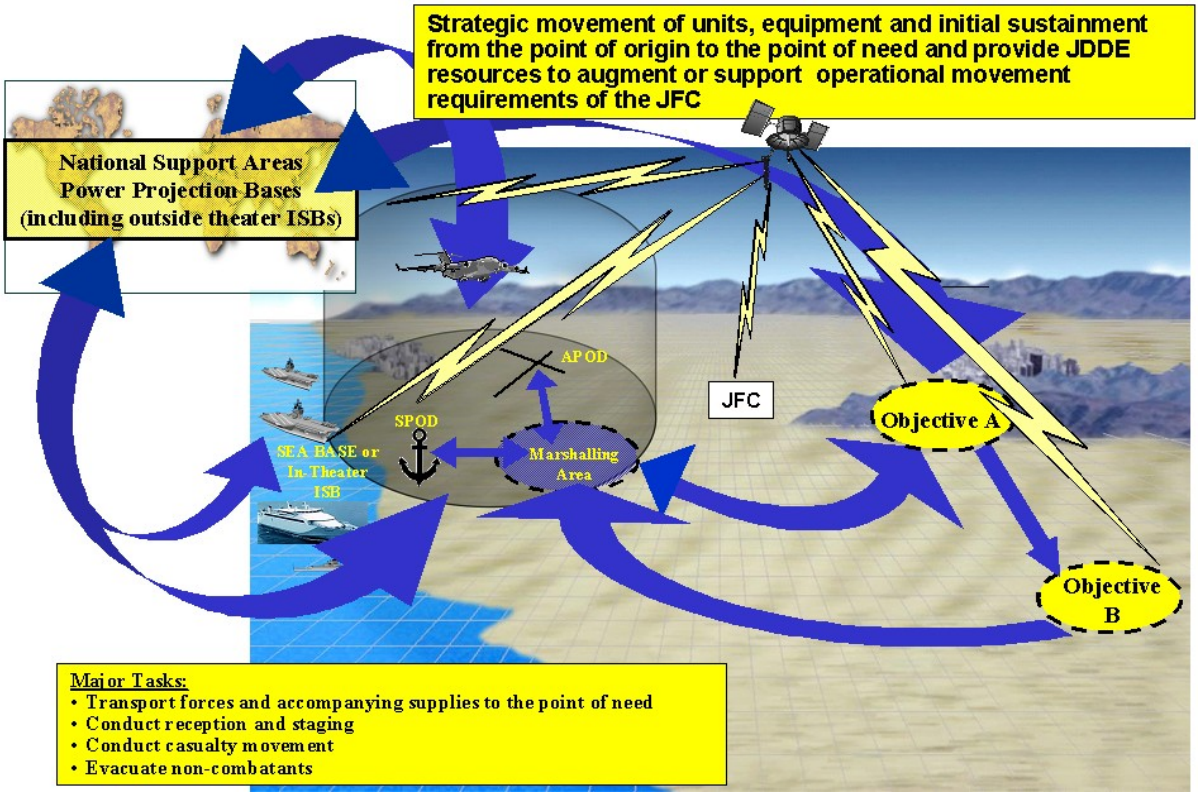

Figure 2: Move the Joint Force

- **Sustain the Joint Force**
  - Build tailored or "capability-configured" loads at the source of supply and ensure the loads are capable of rapid intermodal handling (air, sea, truck, and rail) to minimize en-route and end-user processing and re-configuring.
  - Enable continuous sustainment from strategic providers to forward elements across discontinuous air, sea, and ground lines of communications.
  - Build greater capacity to control and manage inventory stocks, to achieve an appropriate balance between stock positioning and movement requirements.
  - Enhance the capability to configure packing and the delivery of joint/combined force sustainment, to minimize JRSOI, and to support the non-contiguous employment of forces conducting distributed operations.
  - Employ precision delivery platforms with sufficient operational reach to enable sustainment to highly distributed forces across lines of communication that may be subject to interdiction and anti-access activities.

- Integrate and deliver sustainment requirements identified through sense and respond logistics.
- Selectively offload cargo to meet changes in operational requirements.
- Support the return movement of retrograde materiel.
- Integrate and coordinate performance based logistics support and direct vendor deliveries.
- Integrate medical and other commodity-unique logistics systems and processes.
- Support joint force health protection capabilities to meet operational requirements.

Figure 3 below graphically depicts the strategic and operational view of joint force sustainment.

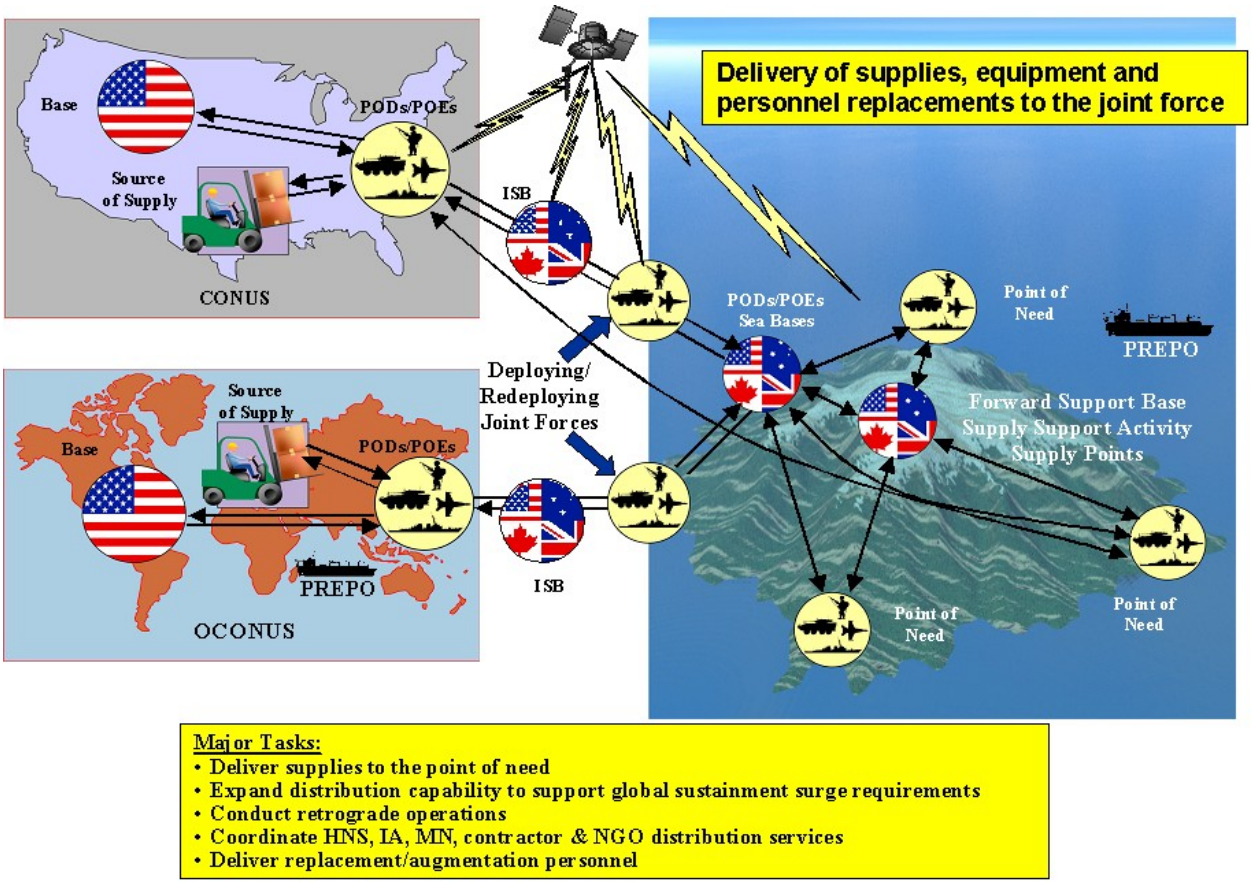

Figure 3: Sustain the Joint Force

- **Operate the JDDE**
    - **Control the JDDE**
        - Establish and enforce business rules and working protocols governing the collaborative support of contributing organizations in the JDDE. Control the enterprise by creating capabilities to plan, schedule, apportion, allocate, route, direct, and validate/adjudicate priorities across the distribution pipeline.
        - Employ a distribution control capability, supported in a net centric environment, as part of a future global command and control system to facilitate an integrated approach to force movement, supply chain integration and decision-making. It should provide asset visibility (particularly in-transit asset visibility) and distribution node capacity levels/status to facilitate decision-making by the enterprise and the ordering activities. This system must seamlessly and securely pull and distribute information from both classified and unclassified networks.
        - Leverage net-centric command and control capabilities. Network the JDDE with continuous, reliable communications and information systems that enable logisticians and customers to see operational requirements in near-real time and to see the support in the pipeline.
        - Leverage collaborative information environment (CIE) capabilities and employ robust, intuitive decision-support tools to enable logisticians to conduct transportation feasibility, mode/node selection, and time-definite delivery analyses.
        - Use Communities of Interest (COI) to support joint deployment and distribution activities.
        - Champion/enforce technology fusion across layers of network infrastructure, communications, data applications, and interfaces.
        - Use modeling and simulation tools to facilitate war-gaming and risk assessment tasks.
        - Develop sufficient information infrastructure capability to anticipate, predict, plan collaboratively, synchronize, and satisfy the

volume/intensity of the net-centric communications requirements of the JDDE.

- Incorporate smart tag capabilities that interact with a modular container system and the net centric environment to provide the capability to quickly identify in-transit assets that require re-distribution.

- **Conduct JDDE Operations**
  - Build and maintain a JDDE that is capable of conducting strategic and theater joint distribution operations as a single seamless function, eliminating the integration, synchronization, and prioritization problems that characterize current operations.
  - Develop and maintain standing, scalable, and modular theater opening, intra-theater mobility, movement control, sustainment, and distribution terminal support packages (leaders, organizations, equipment, procedures, communications, etc.) that will deploy ahead of, or with the same rapidity as, the forces they support. These capability packages should be capable of integrating with existing theater distribution networks and operate as part of the established combatant command and joint task force functional component commander logistics construct, or part of a lead-Service activity tasked with theater distribution functions.
  - Build, in partnership with the commercial distribution industry, an end-to-end, expeditionary, modular, International Organization for Standardization (ISO)-compatible, durable, inter-modal container system.
  - Acquire, manage and distribute funds to support lift capabilities, terminal operations and distribution operations.
  - Execute and manage contingency contracting for commercial, host nation and interagency lift assets.
  - Indemnify selected distribution carriers and contractors.

- Establish, operate and maintain lines of communications and integrate them with commercial, host nation and interagency activities.

- **Protect the JDDE**
  - Ascertain the magnitude of threat(s) across the entire distribution pipeline (e.g., at terminals, hubs, nodes, and in lines of communication), and conduct risk assessments to determine appropriate protective measures.
  - Provide/coordinate for required protection of the distribution pipeline, at a level commensurate with threat assessment.
  - Incorporate force protection planning and execution activities into all aspects of the JDDE to include protection of distribution capabilities sourced from the commercial sector, and for services performed by civilian contractors in theater.
  - Provide physical protection and awareness training to all personnel across the joint distribution pipeline; ensure basic force protection capabilities are embedded in distribution units.
  - Determine the potential impact of threat activity on essential information systems, and coordinate for the protection of the capability provided by information systems (e.g., COP, CIE, AV, etc.).
  - Leverage responsible DOD activities to indemnify JDDE protection requirements; ensure Information Assurance; and Computer Network Defense techniques are incorporated.
  - Leverage counterintelligence (CI) activities resident in the DOD, Central Intelligence Agency, Federal Bureau of Investigation, and other U.S. intelligence community components, to protect the JDDE from intelligence collection efforts of terrorist entities, foreign governments, or organized criminal enterprises.
  - Leverage physical protection capabilities and resources of homeland security for the continental United States (CONUS) distribution nodes/distribution assets.

- **Conduct JDDE Capabilities Development**
  - Establish the strategic vision of the JDDE, including capabilities and application across the strategic, operational and tactical spectrum.
  - Conduct analysis and experimentation of JDDE capabilities to initially determine needs, followed by Doctrine, Organization, Training, Materiel, Leadership, Personnel, and Facilities (DOTMLPF) recommendations/changes.
  - Empower the JDDE with the requisite authorities, resources, and control functions to fully discharge force development responsibilities.
  - Implement and codify JDDE capabilities in conjunction with combatant commands, Services, interagency and multi-national fora.
  - Build, train, and maintain a professional community of joint/Service logisticians proficient in joint operations and distribution, and multi-level planning and execution.
  - Manage the joint distribution enterprise IT portfolio of systems – guide IT investments in all aspects of the enterprise.
  - Shape Services/agency decisions on IT development and integration germane to the JDDE.
  - Influence the development of a single financial system that integrates commercial and DOD capabilities and enables agility of logistics support provided to JFCs. Simplify the financial systems that support the JDDE to reduce complexity of the financial cost accounting, billing, service reimbursement, and redirection/cross leveling of resources procedures.
  - Establish and manage a global distribution container system.
  - Examine the Unified Command Plan, and executive agency (EA) roles and responsibilities and how they align with JDDE to ensure that essential distribution related tasks are performed effectively.

3.5 Principles

Joint distribution operations are guided by enduring logistic principles that serve as guides for planning, organizing, managing, and executing. They will not serve as a set of rigid rules, nor will they apply in every future operation. Applying creativity, insight, and boldness in the application of logistic principles is essential to successful JDDE operations – balancing these principles with the application of sound judgment and decision-making skills are the basis of the art of logistics.

The logistic principles most critical to a successful deployment and distribution enterprise are: responsiveness, flexibility, sustainability, survivability, and simplicity. These principles should be used as a lens in which to examine potential capability proposals in follow-on capabilities-based assessments.

- **Responsiveness**. Responsiveness is the right support in the right place at the right time. Among the logistics principles, responsiveness is the keystone. All other principles become irrelevant if logistics support does not support the commander's concept of operations. Responsiveness is achieved by the enterprise if it can close, maneuver, reposition, sustain, and reconstitute joint forces with a degree of rapidity, precision, and control to meet JFC requirements. Responsiveness of the supply chain must be measured from the customer's perspective. In major combat operations, distribution responsiveness is most difficult to achieve during the seize-the-initiative portion of a joint campaign when the JFC may be required to conduct simultaneous, distributed, non-linear, and non-contiguous combat operations at the same time he is closing and sustaining the rest of his force. In the future, the responsiveness and operational reach of inter/intra theater mobility platforms will be measured in hours and days, not weeks and months. In order to meet responsiveness requirements of the follow-on "decisive-operations" portion of the campaign, the enterprise will be required to source and project standing, scalable, and expeditionary theater distribution capabilities in support of JFC requirements.

- **Flexibility.** Flexibility is the ability to adapt logistics structures and procedures to changing situations, missions, and concepts of operation. The ability to rapidly reposition or operationally maneuver joint forces is an example of the type of flexibility that the enterprise must possess to support fluid joint operations. The principle of flexibility also includes the concepts of alternative planning (e.g., branches and sequels), anticipation, reserve assets, redundancy, and centralized control and decentralized execution. Deployment/distribution plans and operations must be flexible to achieve both responsiveness and survivability. Flexibility will not be realized if the enterprise does not have near real-time visibility of customer requirements and support flowing to the customer. Deployment and distribution-related decision-support tools need to possess the ability to perform time-sensitive course of action, supportability, and risk assessment analyses in order to properly plan and react to changing missions and concepts of operation.

- **Sustainability.** Sustainability is the ability to maintain logistics support to all users throughout the area of operations for the duration of the operation. Lean supply chains will characterize future operations, placing critical importance on precise time-definite delivery of equipment and supplies to joint forces throughout the battlespace. This principle poses the greatest challenge to the distribution enterprise since future forces will likely be highly distributed across greater distances with lines of communication that must connect non-linear and non-contiguous joint operating areas. A JDDE that is not fully networked with the customer and the supplier will not be able to see operational requirements in near-real time and will not be able to generate pipeline support, or manipulate the pipeline to adapt to changing operational priorities.

- **Survivability.** Survivability is the capacity of the organization to protect its forces and resources. Distribution and other logistic units and installations are high-value targets that must be guarded to avoid presenting the enemy with a critical vulnerability. Survivability requirements present particular challenges to the

enterprise in its mission to provide responsive and sustained distribution support to dispersed joint forces. Requirements for the protection of enterprise personnel, mobility assets, terminals, nodes (afloat and ashore), command and control centers, information, and lines of communication must be factored into the overall concept for logistics support for the joint force. Joint distribution operations may have to execute in an electromagnetic pulse (EMP) and chemical, biological, radiological, nuclear, and high yield explosive (CBRNE) environment. Force protection considerations will likely force the enterprise to continuously adjust route allocation, carrier selection, and scheduling activities, necessitating a robust set of decision-support tools and models to aid in planning and execution. The enterprise must also effectively address the protection of distribution capabilities sourced from commercial, non-governmental sources.

- **Simplicity.** Simplicity describes clear, uncomplicated, and concise orders, plans, and procedures that foster efficiency in both planning and execution of logistics operations. Simplicity fosters efficiency in both planning and execution of logistic operations. Commander's intent, mission-type orders, and standard rules, tools, and procedures contribute to simplicity. Simplified procedures for establishing movement and issue priorities will greatly enhance joint distribution operations.

3.6 Attributes

Attributes are testable or measurable characteristics that describe an aspect of a system or capability. The attributes listed below best describe the critical characteristics required of an effective and efficient JDDE – collectively they serve as a basis for the development of standards that are explicitly linked to mission-essential tasks and supporting tasks.

- **Capacity.** The capacity of the JDDE is defined by the physical quantity, size, mix, configuration, and readiness of its assets and infrastructure. Capacity is not a static attribute; it includes the flexibility to expand or contract enterprise elements in response to ever-changing missions and requirements.

- **Visibility**. Visibility is the capability to determine the status, location, and direction of flow for all forces, requirements and materiel in the JDDE. Joint end-to-end visibility is required over operational capabilities and capability packages, organizations, people, equipment, and sustainment moving through the pipeline. It also includes the organic military mobility forces and commercial augmentation that move people and things through the pipeline, the financial transactions that support them, and the nodes and links comprising the pipeline. Visibility requires the availability of timely, accurate, and usable information essential to the maintenance of a common operating picture within the overall distribution enterprise information network.

- **Reliability**. Reliability is the degree of assurance or dependability that the JDDE will consistently meet its support requirements to specified standards. Reliability instills trust and confidence of the customer in the certainty that the enterprise will meet warfighter demands under clearly established and recognized conditions.

- **Velocity**. Velocity is the speed and direction requirements are fulfilled by the JDDE. Rapidity is only one aspect of velocity. Requirements must be fulfilled at the right speed. This means that synchronization of the speeds of the various aspects of the distribution process is required in order to maximize effectiveness. Velocity also incorporates the ability of elements of the JDDE to forecast, anticipate, and plan distribution execution. A JDDE that has sufficient velocity meets performance expectations and satisfies mission requirements as defined by the supported commander's concept of operations.

- **Precision**. Precision within the JDDE means the accuracy with which delivery of forces, requirements, and materiel occurs at the right time, the right place, and the right amount. Precision also addresses the ability of the JDDE to minimize deviation from acceptable standards as it reacts to dynamically changing conditions and requirements.

3.7 Applicable Military Functions and Activities

Appendix C to this paper lists the set of tasks, conditions, and metrics/standards, and attributes applicable to the JDDE described in this concept.

3.8 Relationship to other Joint Concepts

Logistic-related capabilities derived from other supporting joint concepts are listed in Appendix E - they are explicitly mapped to the essential tasks of the JDDE in this concept paper.

3.9 Application of Concept within a Campaign Framework and CONOPS

An illustrative concept of operations (CONOPS), developed in the context of a relevant Defense Planning Scenario, is contained in Appendix D. This CONOPS, evaluated within the framework of a wargame, serves as an effective way to describe time/distance challenges for a future JFC who will integrate JDDE capabilities to achieve desired effects or campaign objectives. This appendix is classified Secret (NOFORN).

Section 4 – TASKS, CONDITIONS AND STANDARDS

4.1 Overview

The purpose of this section is to outline the tasks, conditions, and standards associated with *joint distribution operations* as described in this concept. These tasks were derived from a number of sources. Many of these tasks were extracted directly from the Universal Joint Task List[5]. Additional tasks were distilled from distribution-related capability statements addressed in other supporting joint operating or integrating concepts. Other tasks were operationally derived.

This concept outlines three key distribution tasks – with a number of sub-tasks listed for each key task. The first two tasks focus on global activities the JDDE performs for the JFC to achieve

[5] CJCSM 3500.04C, Universal Joint Task List, 1 July 2002

desired effects or accomplish stated operational objectives. The third task describes the essential activities the JDDE accomplishes internally to enable the performance of the first two tasks.

The conditions associated with each key task are, for the most part, the same for corresponding subordinate tasks. Standards, on the other hand, are linked to a discrete sub-task.

4.2 Tasks, Conditions and Standards for Future Distribution Operations

Future joint distribution operations will be accomplished by performing the tasks and subtasks outlined in Appendix C. Associated conditions and standards for these tasks are also provided in the appendix.

4.3 Capability Imperatives for Joint Distribution Operations

Below is a list of capability imperatives to perform the key tasks and sub-tasks noted in Appendix C. This summary list of critical capabilities is derived from the list of capabilities detailed in Appendix E. Appendix E is a list of distribution-related capabilities cited in supporting joint operating and integrating concepts as well as those capabilities distilled from this concept effort.

- The ability and authority to conduct JDDE capability development is an inherent capability of the enterprise. Critical is the authority to determine joint distribution enterprise requirements across the DOTMLPF spectrum for activities such as the ability to determine the requirements for inter and intra-theater lift platforms.
- The ability to build and enforce a single, multi-echelon prioritization system is a key enabler to the rapid, agile and accurate delivery of people, equipment and supplies. A key aspect is the ability for each echelon to set priorities for units and areas under its operational control. This capability would allow the distribution system to automatically discern JFC operational requirements/priorities or changes route/re-route critical commodities directly to the most critical units.
- The ability to rapidly establish a C2 system that can identify, locate, communicate, and perform planning and execution activities in a real-time, collaborative, network

environment complete with Common Operational Picture (COP), Asset Visibility (AV), In-Transit Visibility (ITV), decision support tools and modeling & simulation across all elements of the joint interagency multi-national force up to and including the secret level.

- The ability to configure and deploy scalable, modular joint forces from strategic and operational distances requiring minimum, or all together eliminating, JRSOI activities upon arrival.
- The ability to protect the complete joint distribution pipeline from cyber, physical, and intelligence threats without serious operational degradation to the JFC.
- The ability to move forces from strategic and operational distances in a single move, as required, using high-speed mobility platforms to JFC designated locations.
- The ability to conduct arrival and assembly, and joint distribution operations in an expeditionary, or anti-access environment aboard the sea base, as well as at Intermediate Staging Bases (ISBs) and other basing options.
- The ability to deploy and maneuver forces from the sea base.
- The ability to execute theater distribution control from the sea base.
- The ability to reduce lift requirements on the joint distribution enterprise by leveraging host nation and regional contract support from acquisition and cross servicing agreements (ACSA) and selected prepositioning (where possible).
- The ability to rapidly organize, track, shift, and potentially reconfigure forces and support, even en route, that are modular, tailorable and delivered directly to JFC designated points of need.
- The ability to develop and maintain standing, scalable and modular distribution support packages (leadership, trained personnel, communication and reach-back) to deploy with at least, the same rapidity as operational forces.
- The ability to locate, move, track and retrograde sufficient quantities of reparable items and carcasses to repair facilities to prevent operational pauses in theater due to lack of replacement principle end items or components.
- The ability to rapidly reconstitute and re-deploy joint forces and provide sustainment to an alternate theater or points of origin.
- The ability to direct/redirect scarce commodities in the joint distribution pipeline to satisfy the most current operational requirements established by the JFC, with financial

system support focused on the dynamic priorities of JFC units, rather than the Service of origin.

- The ability to plan and execute rapid medical evacuations and force extractions with agility and precision.
- The ability to employ precision-delivery platforms with sufficient range to provide sustainment to highly distributed deployed forces, especially in austere, anti-access environments.
- The ability to apply high-speed intra-theater connector lift to rapidly move forces and sustainment in a highly distributed environment.
- The ability to perform predictive analysis of sustainment for application of sense and respond logistics (SRL).

Section 5 – IMPLICATIONS

5.1 General

Section 5 outlines key implications generated from this joint logistics integrating concept. The below descriptions have implications for other concepts to address. They also serve to guide both joint and Service experimentation and concept development.

5.2 Implications for Other Concepts

- **Establishment of the Net Centric Environment.** This is the single most critical aspect needed to successfully operate the JDDE. Although most of the requirements stated below are already addressed in the Net Centric Environment Joint Functional Concept, they are being restated here to emphasize their importance to this integrating concept: (a) a real, or near real-time common operating picture tailorable to user needs, (b) timely, reliable, and accurate asset visibility, and (c) a collaborative environment that enables direct communication with any and all applicable stakeholders. The future enterprise also requires: (d) suite of decision support tools and modeling/simulation capabilities to coordinate distribution planning and control execution.

The fulfillment and attainment of these capabilities will enhance the ability of the JFC and JDDE to accurately anticipate and predict sustainment and distribution requirements, enabling the enterprise to commence rudimentary SRL support. The establishment of net centric capability also enables the JDDE to rapidly and precisely deliver joint forces and sustainment to a point-of-need.

The distribution capabilities cited above have implications and serve as requirements for both the Net Centric Environment Joint Functional Concept and Joint C2 Joint Integrating Concept and should be developed concurrently.

- **Establishment of an Enabling Financial System.** Current DOD financial systems lack agility and can hinder distribution/redistribution operations within a JOA. The JDDE requires an integrated financial capability, supporting both DOD and the commercial sector that is focused on JFC operational priorities as established via a multi-echeloned priority system, rather than by the Service of origin or transportation mode. It must enable the distribution/redistribution of scarce common-user commodities not only among U.S. Forces, but also among multi-national partners that can rapidly take advantage of existing acquisition and cross servicing agreements. Current policy, which obligates funds at time of requisition and is incapable of changing a requisition line of accounting, is not conducive to this concept.

  The future DOD financial system must also provide a single billing capability for end-to-end movement of personnel and materiel (forward and retrograde) with up front pricing by multiple carriers.

  Such transformation will require extensive changes to national policy and have broad implications to many organizations. Recommend assessment and development actions be spearheaded by the Focused Logistics Functional Capabilities Board (FCB) but considered by all FCBs and concept developers.

- **Protection of the JDDE.** Protection against physical and cyber threats, and the conduct of protective counterintelligence activities is clearly required. Net-centric operations and distribution in a non-contiguous, distributed environment will depend on secure lines of communication and an uninterrupted flow of information across the joint distribution pipeline. Sufficient bandwidth must be available to handle the volume and intensity of communications required for future net-centric logistic operations. Physical protection of air, land and sealift assets as well as facilities in the distribution pipeline is also required. Protection implications are extensive and affect multiple organizations. Organizations within the distribution pipeline must be provided with self and unit protection training and possess some level of embedded force protection capabilities.

  Primary responsibility to assure physical protection requirements for the JDDE resides with the force protection concept, whereas the net centric environment concept will have responsibility to protect distribution information and communications through the information assurance (IA) and computer network defense (CND) efforts. Both concepts need to address the protection requirements of this joint integrating concept.

- **Development of Afloat Joint Reception, Staging, Onward Movement and Integration (JRSOI) and Intermediate Staging Base (ISB) Capabilities.** Strategic Planning Guidance and specifically Defense Planning Scenario (DPS) Major Combat Operation-1 (MCO-1), as well as other anti-access or austere environment scenarios, identify the need and capability for JRSOI and ISB functions afloat. To a very small degree, this capability exists today, but it is ad hoc in nature. In some scenarios, the sea base may be the only available near, or in-theater, location for the conduct of JRSOI or service as an ISB. Implication of developing this capability goes to the Joint Seabasing Joint Integrating Concept.[6]

  The future sea base, as the JRSOI point for a JOA, would possess the capability to

[6] Seabasing is described in the Seabasing JIC as: ". . . .the rapid deployment, assembly, command, projection, reconstitution, and re-employment of joint combat power from the sea, while providing continuous support, sustainment, and force protection to select expeditionary joint forces without reliance on land bases within the JOA. These capabilities expand operational maneuver options, and facilitate assured access and entry from the sea."

receive forces from strategic distances. This requirement has implications to the seabasing concept and for the development of future strategic airlift and intra-theater connector capabilities.

As with an intermediate staging base, the sea base further needs the capability for mission module swap-outs[7] for current and future modular platforms. Examples of modular platforms include the SSGN (guided missile submarine) and Littoral Combat Ship. This may be key to operations where the distance to support bases capable of conducting the swap-out is too great to support warfighter operational requirements. This swap-out capability has implications for the seabasing concept and the US Navy, regarding naval ship construction.

Additionally, recommend the sea base concept include the capability to receive, stabilize and transport casualties, patients, and evacuees.

- **Reducing demands on the JDDE.** Key to attaining distribution-based logistics is the ability to support the operating forces in a manner to allow them to maintain their operational/tactical tempo. To enhance this capability necessitates the reduction of logistic burden and footprint in theater, through a variety of means. Examples include the attainment of increased reliability and durability of principal end items and weapons systems, through the extensive use of predictive preventative maintenance and networked onboard diagnostics systems that could pulse the system when maintenance or sustainment issues arise. Other means could use advanced fuel technologies, such as fuel cells or onboard water generation systems, decreasing the amount of bulk liquids requiring movement through the distribution system. Reduced distribution support burden can also occur by using resources available in the AOR, as well as leveraging commercial sources and host nation support. Toward this end a standing database of specific pre-negotiated arrangements by theater should be maintained in the regional operational net assessment. Selective indemnification could be applied to increase levels

[7] Mission swap-outs refer to the ability to change the mission packages of modular platforms such as Littoral Combat Ship (LCS) and SSGN. This entails module removal and replacement as well as any associated reconfiguration of the platform itself.

of commercial support distribution activities in the JOA.

Reducing demands on the JDDE has direct implications to the Focused Logistics FCB. All joint concepts should examine and ensure that the capabilities espoused must reduce the logistics burden and theater footprint.

5.3 Experimentation/Testing Recommendations

5.3.1 Introduction

Joint and Service testing of many of the capabilities described in this joint integrating concept should be conducted to further explore, validate, and refine potential change across the DOTMLPF spectrum. Experimentation will provide further insight and understanding, and assist in focusing further concept development. Wargames, exercises, seminars, and detailed analyses are all forms of acceptable experimentation.

5.3.2 Recommendations

Following are topical areas of this integrating concept recommended for experimentation:

- **C2.** Experimentation focused on command relationships among JFCs and the JDDE. Emphasis on the ability of the JDDE to plan and execute joint distribution operations needed to satisfy a supported commander's operational requirements, and organizational C2 elements and their relationships.

- **COP and Interactivity.** Testing to determine the quality (i.e., timeliness, accuracy, and reliability) of a net-centric enabled common operating picture. Emphasis on the ability of the JDDE to conduct interactive distribution planning and execution (both forces and sustainment) and the ability to conduct in-transit redistribution.

- **Financial Support Agility.** Experimentation focused on providing the DOD, the supported commander, and the commercial sector with a seamless and integrated financial capability that enables distribution/redistribution of scarce commodities without restrictions.

- **Future Lift Assets.** To determine an optimum configuration mix of lift assets needed to satisfy future distribution requirements, experimentation and analysis of alternate configurations of high-speed inter-theater sealift, high-speed intra-theater shallow draft connectors, ground transport capabilities (truck and rail), and inter/intra-theater airlift should be conducted. Recommend use of the operational demands derived from the SDTE mid-term MCO.

- **JDDE Protection.** Experimentation with alternate scenarios to determine effective protection measures against cyber and physical threats to the JDDE pipeline. Emphasis on determination of optimum balance between degree of protective restrictions and ease of operator access, protection effectiveness of information assurance and computer network defense, and cost.

- **Afloat Joint Reception, Staging, Onward Movement, and Integration/Intermediate Staging Base Capabilities.** Recommend testing of seabasing JRSOI/ISB capabilities to ensure theater reception throughput and enhanced operational agility. Place emphasis on the determination of the capacity of alternate afloat JRSOI/ISB configurations, application of modular platforms, and cost.

- **Multi-Echelon, Priority System.** Experimentation with the proposed multi-echeloned priority system to determine the feasibility of identifying supply priorities of a theater competing for scarce commodities, and the ability of the JDDE to satisfy theater requirements based on the multi-echeloned established priorities. Emphasis on the dynamic aspects of theater operations/redistribution and the capability of the JFC to update JOA support priorities and the JDDE to discern JOA priorities and redistribute critical in-transit commodities.

- **Predictive Analysis.** Conduct experimentation to further develop predictive analysis of sustainment requirements. Recommend emphasis on application of initial sense and respond logistics areas by the JDDE in support of the JFC.

- **Fuel Efficiencies.** Conduct experimentation and testing to determine fuel efficiencies and the potential reduction of bulk liquid distribution requirements.

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APPENDICES

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Appendix A
Joint Logistics (Distribution) Joint Integrating Concept Reference Documents

National Military Strategy, 2004

Strategic Planning Guidance, 2004

SECDEF Memo (Operational Availability Action Items) 18 August 2003

JP 1-02, DOD Dictionary of Military and Associated Terms

CJCSINST 3170.01D Joint Capabilities Integration and Development System (JCIDS)

Joint Concept Development and Revision Plan, July 2004

Joint Operations Concept (JOpsC), November 2003

Capstone Concept for Joint Operations (Version 2.0, August 2005)

Major Combat Operations Joint Operating Concept (MCO JOC), 9 September 2004

Focused Logistics Joint Functional Concept, December 2003

Focused Logistics Campaign Plan, 2004

DOD Logistics Transformation Strategy, dated 10 Dec 04

Joint Seabasing Joint Integrating Concept, December 17, 2004

Joint Undersea Superiority Joint Integrating Concept

Joint Urban Operations Joint Integrating Concept, (Version, 09J.A.3), 17 May 2005

C2 Joint Integrating Concept, (Draft Version .0.8), 11 May 2005

Global Strike Joint Integrating Concept, 28 October 2004

Integrate Air and Missile Defense (IAMD) Joint Integrating Concept, 10 December 2004

Joint Forcible Entry Operations (JFEO) Joint Integrating Concept Ver.92A3, 15 September 2004

Defense Planning Guidance (DPG) FY 04

Transformational Planning Guidance (TPG), April 2004

Net Centric Environment Joint Functional Concept, 21 January 2005

Logistics Transformational Roadmap, draft, 15 November 2004

Joint Theater Logistics Management (JTLM) Implementation Plan, 2 June 2004

Joint Pub 3-17, Joint Doctrine and Joint TTPs for Air Mobility Operations, Aug 2002

Joint Pub 3-35, Joint Deployment Operations

Joint Pub 4.0, Doctrine for Logistic Support of Joint Operations, 06 April 2004

Joint Pub 4-01.4, Joint TTPs for Joint Theater Distribution, 22 August 2000

Joint Pub 4-02, Doctrine for Health Service Support in Joint Operations, 30 Jul 2001

Joint Pub 4-02.1, JTTP for Health Service Logistic Support in Joint Operations, 6 Oct 1997 (under revision)

Joint Pub 3-17, Joint Doctrine and Joint TTPs for Air Mobility Operations, Aug 2002

Joint Pub 4-01.3, Joint TTPs for Movement Control

Joint Pub 4-01.5, Joint TTPs for Transportation Terminal Operations, Apr 2002

Joint Pub 4-01.2, Joint TTPs for Sealift Support to Joint Operations, Oct 1996

Joint Pub 4-02.2, Joint TTPs for Patient Movement in Joint Operations, 30 Dec 1996

Joint Pub 4-06, Joint Tactic, Techniques, and Procedures for Mortuary Affairs in Joint Operations, 28 August 1996

Joint Pub 4-09, Joint Doctrine for Global Distribution

JROCM 042-05, 16 Feb 05, DOTMLPF Recommendation Deployment Planning and Execution Lessons Learned

JROCM 218-04, 2 Dec 04, Joint Force Projection FY05 ACTD

Naval Doctrine Publication 4, Naval Logistics, Jan 95

CJCSM 3500.04C, Universal Joint Task List (UJTL), Jul 2002

Appendix B

Acronyms and Glossary

Acronyms

ABC	Activity Based Costing
ACSA	Acquisition and Cross Servicing Agreements
AIT	Automated Identification Technology
APOE	Air Port of Embarkation
AV	Asset Visibility (New term for Total Asset Visibility/In-transit Visibility)
C2	Command and Control
C4	Command, Control, Communications and Computers
CBA	Capabilities-Based Assessment
CBRNE	Chemical, Biological, Radiological, Nuclear, and High Yield Explosives
CCJO	Capstone Concept for Joint Operations
CI	Counterintelligence
CIA	Central Intelligence Agency
CIE	Collaborative Information Environnent
CJCS	Chairman of the Joint Chiefs of Staff
CND	Computer Network Defense
COCOM	Combatant command (command authority)
COI	Communities of Interest
CONOPS	Concept of Operations
CONUS	Continental United States
COP	Common Operating Picture
CWT	Customer Wait Time
DLA	Defense Logistics Agency
DMSO	DOD Modeling and Simulation Office
DOD	Department of Defense
DOTMLPF	Doctrine, Organization, Training, Material, Leadership, Personnel, Facilities
DPG	Defense Planning Guidance
DPS	Defense Planning Scenarios
DST	Decision Support Tools
DTS	Defense Transportation System
EMP	Electromagnetic Pulse
FARP	Forward Arming and Refueling Point
FBI	Federal Bureau of Investigation
FCB	Functional Capabilities Board
FHP	Force Health Protection
HNS	Host Nation Support
HSC	High Speed Connector
HVT/HPT	High Value/High Payoff Targets
IA	Information Assurance, Inter-Agency

Acronyms

IAMD	Integrated Air and Missile Defense
ISB	Intermediate Staging Base
ISO	International Standards Organization, in support of
IT	Information Technology
ITV	In-transit Visibility [See AV]
JTAV	Joint Total Asset Visibility [See AV]
JCDRP	Joint Concept Development and Revision Plan
JCIDS	Joint Capability Integration and Development System
JDDE	Joint Deployment and Distribution Enterprise
JFC	Joint Force Commander/Joint Functional Concepts
JFEO	Joint Forcible Entry Operations
JFHP	Joint Force Health Protection
JIC	Joint Integrating Concept
JIM	Joint, Interagency and Multi-national
JL (D) JIC	Joint Logistics (Distribution) Joint Integrating Concept
JOA	Joint Operations Area
JOC	Joint Operating Concept
JOpsC	Joint Operations Concepts
JRSOI	Joint Reception, Staging, Onward Movement and Integration
JTF	Joint Task Force
JTLM	Joint Theater Logistics Management
JTTP	Joint Tactics, Techniques and Procedures
JUSS	Joint Under Sea Superiority
LOC	Lines of Communications
LOGCAP	Logistics Civil Augmentation Program
M&S	Modeling and Simulation
MCO	Major Combat Operations
MN	Multi-national
MPF (F)	Maritime Prepositioning Force (Future)
NBC	Nuclear, Biological and Chemical
NEO	Non-combatant Evacuation Operations
NGO	Non Governmental Organization
NM	Nautical Mile
NMS	National Military Strategy
NOFORN	No Foreign Nationals
ONA	Operational Net Assessment
PME	Professional Military Education
POD	Port of Debarkation
POE	Port of Embarkation
PVO	Private Volunteer Organizations
RCC	Regional Component Commander
RFID	Radio Frequency Identification
ROMO	Range of Military Operations

Acronyms

S&R	Sense and Respond
SECREPS	Secondary Reparables
SOF	Special Operations Forces
SPOE	Sea Port of Embarkation
SRL	Sense and Respond Logistics
SSGN	Guided Missile Submarine
STOL	Short Take Off and Landing
TAV	Total Asset Visibility [See AV]
TPG	Transformation Planning Guidance
UJTL	Universal Joint Task List

Glossary

1-4-2-1	Strategy; Calls for four levels of priority 1-Defend the homeland against direct attack 4-Assure, dissuade, deter in and from four forward regions 2-Surge jointly to swiftly defeat adversaries in two overlapping focused campaigns 1-Preserve the President's option to decisively defeat one of these adversaries in a conclusive campaign
10-30-30	10 days to Seize the Initiative, 30 days to Decisively Defeat, 30 days to Redeploy
Action	A structured behavior of limited duration.
Activity	A structured behavior of continuous duration.
Assumption	A supposition on the current situation or a presupposition on the future course of events, either or both assumed to be true in the absence of positive proof, necessary to enable the commander in the process of planning to complete an estimate of the situation and make a decision on the course of action.
Attribute	A testable or measurable characteristic that describes an aspect of a system or capability
Capability	The ability to achieve an effect to a standard under specified conditions through multiple combinations of means and ways to perform a set of tasks
Carcasses	Unserviceable Principle End Items (PEI), usually, but not always, indicates PEI has been stripped or partially stripped and will need to be evacuated to a major repair facility
Command and Control (C2)	The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.
Commanders Intent	A concise expression of the purpose of an operation and the desired end state that serves as the initial impetus for planning
Communities of Interest	Groups formed to replace Special Interest Groups and to provide a forum for members to network and exchange ideas. Often found within the DOD Command and Control community, although not limited to same.
Condition	A variable of the environment that affects performance of a task.
CONOPS (Concept of Operations or Commander's Concept)	The overall picture and broad flow of tasks within a plan by which a commander maps capabilities to effects, and effects to end state for a specific scenario.

Glossary

Configure	To arrange, construct or build, as in "scalable, modular forces" with a known degree of sustainment, allowing immediate engagement/support of the JTF upon arrival at a designated theater POA (point-of-action).
Criterion	A critical, threshold, or specified value of a measure.
Distribution	The operational process of synchronizing all elements of the logistic system to deliver the "right things" to the "right place" at the "right time" to support the geographic combatant commander. (JP1-02)
Distribution Based Logistics	Logistics system which provides certainty of support by concentrating on transportation effectiveness and information precision versus inventories
Deployment	The relocation of forces and materiel to desired areas of operations. Deployment encompasses all activities from origin or home station through destination, specifically including intra-continental United States, intertheater, and intratheater movement legs, staging, and holding areas. (JP 1-02)
Effect	An outcome (condition, behavior, or degree of freedom) resulting from tasked actions.
End state	The set of conditions, behaviors, and freedoms of action that defines achievement of the commander's objectives.
End-to-End	Boundaries of the JDDE applicable to force deployment and movement of materiel to support the operational requirements of a JFC/COCOM. Force deployment boundaries originate at unit origin or home station and terminate when units are located at their JFC designated point of need. Inclusive are intra-continental, inter-theater, intra-theater movement, and reception/assembly activities as required. Material movement commences at the source of supply and terminates with commodity receipt by the consuming unit.
Enterprise	Any significant undertaking united by a set of common and fully integrated processes, standards, systems, people, organizations, shared-knowledge, and technical connectivity to accomplish a broad, enduring mission. Note: In the context of this integrating concept, the JDDE is that complex of equipment, procedures, doctrine, leaders, communication networks, shared information, organizations, facilities, training, and material necessary to conduct joint distribution operations.
Expeditionary Distribution	The operating process in an unimproved, austere environment of synchronizing all elements of the logistics system to deliver the "right things" to the "right place" at the "right time" to support the geographic combatant commander.
Force	1. An aggregation of military personnel, weapon systems, equipment, and necessary support, or combination thereof. 2. A major subdivision of a fleet. (JP 1-02)

Glossary

Force Closure	The point in time when a supported JFC determines that sufficient personnel and equipment resources are in the assigned operational area to carry out assigned tasks. (JP 1-02)
Force Health Protection or Joint Force Health Protection	Represents all services performed, provided, or arranged by the Services (or joint elements) to promote, improve, conserve, or restore the mental or physical well-being of personnel. These services include, but are not limited to, the management of health services resources, such as manpower, monies, and facilities; preventive and curative health measures; evacuation of the wounded, injured, or sick; selection of the medically fit and disposition of the medically unfit; blood management; medical supply, equipment, and maintenance thereof; combat stress control; medical, dental, veterinary, laboratory, optometry, medical food, and medical intelligence services. (JP 1-02)
High Speed Intra-theater connector	Term normally only applied to water craft capable of traveling at least 40 Knots and certified to travel intra-theater distances
Inter-agency	A broad generic term that describes the collective elements or activities of the Department of Defense and other US Government agencies, regional and international organizations, nongovernmental organizations, and commercial organizations engaged in a common effort.
Measure	Quantitative or qualitative basis for describing the quality of task performance.
Measures of Performance	Measures designed to quantify the degree of perfection in accomplishing functions or tasks.
Measures of Effectiveness	Measures designed to correspond to accomplishment of mission objectives and achievement of desired effects.
Metric	A quantitative measure associated with an attribute.
Mission	The end state, purpose, and associated tasks assigned to a single commander.
National Support Area	Strategic level location from which equipment and supplies reside for support of JFCs. Generic term which includes Intermediate Staging Bases outside a specific theater.
Objective	A desired end derived from guidance.
Performance Based Logistics	An approach that establishes weapon system readiness goals and encourages the creation of incentives to attain those goals aided by clear lines of authority and accountability. PBL places accountability for readiness on program managers who are given the latitude to contract for sustainment from organic providers, the industrial sector, or a partnership between organic and commercial providers. (11th Glossary of Defense Acquisition Acronyms and Terms)
Point of Need	A physical location designated by the JFC as a receiving point for forces or commodities, for subsequent employment, emplacement, or consumption.

Glossary

Power Projection Bases	Generic Term referring to locations where forces have been deployed from the Continental United States or other theaters in preparation for employment. The political impact of a Power Projection Base may be to shape advisory behavior and prevent hostilities. If not, forces are then moved into the JOA to support the operation.
Precision Delivery Platform	Air, Surface (Ground and Sea), Subsurface vehicle or apparatus meant to carry and deposit people, equipment or supplies to the point of need without requiring further relocation to meet customer's need. In air: delivery to the aircraft; surface: delivery to the vehicle, ship, boat or ground location for immediate use; subsurface: delivery to a location where submarine commander has designated. Implies very specific times and very small margins of error.
Reconstitution	Those actions taken by a military force during or after operational employment to restore its combat capability to full operational readiness.
Recovery	Actions taken to extricate damaged or disabled equipment for return to friendly control or repair at another location. (JP 1-02)
Redeployment	The transfer of forces and materiel to support another JFC's operational requirements, or to return personnel, equipment, and materiel to the home and/or demobilization stations for reintegration and/or out processing. (JP 1-02)
Repositioning	To place military units, equipment, or supplies at or near the point of planned use or at a designated location to reduce reaction time, and to ensure timely support of a specific force during initial phases of an operation. (JP 1-02)
Retrograde	Retrograde is the return of forces, system components and carcasses requiring maintenance (or re-set.)." Rationale: Retrograde is a key factor in the end to end distribution discussion.

Glossary

Sense and Respond (Logistics)	Sense and Respond Logistics is a transformational network-centric concept that enables Joint effects-based operations and provides precise, agile support. Sense and Respond Logistics relies upon highly adaptive, self-synchronizing, and dynamic physical and functional processes. It predicts, anticipates, and coordinates actions that provide competitive advantage spanning the full range of military operations across the strategic, operational, and tactical levels of war. Sense and Respond Logistics promotes doctrinal and organizational transformation, and supports scalable coherence of command and control, operations, logistics, intelligence, surveillance, and reconnaissance. Implemented as a cross-service, cross-organizational capability, Sense and Respond Logistics provides an end-to-end, point-of-effect to source-of-support network of logistics resources and capabilities. Within Sense and Respond Logistics, every entity, whether military, government, or commercial, is both a potential consumer and a potential provider of logistics. It delivers flexibility, robustness, and scalability for Joint expeditionary warfare through adaptive, responsive, real-time, demand and support networks within U.S., allied, and coalition operations. (OFT Concept Document (Short Version) *Operational Sense and Respond Logistics* 6 May 2004).
Shared Situational Awareness	The ability of leaders and personnel in the JDDE to understand the supported commanders intent and be aware of the effect and consequences that all distribution decisions will have on supporting the commander and the stakeholders that comprise the enterprise.
Standard	The minimum proficiency required in the performance of a task. For mission-essential tasks of joint forces, each task standard is defined by the JFC and consists of a measure and criterion.
Sustainment	The provision of personnel, logistics, and other support required to maintain and prolong operations or combat until successful accomplishment or revision of the mission or of the national objective.
Task	An action or activity based upon doctrine, standard procedures, mission analysis or concepts that may be assigned to an individual or organization.
Transportation Closure	The actual arrival date of a specified movement requirement at port of debarkation. (JP 1-02)
Unit-Configured Load	Pallets or commodity packages created at a source of supply for a specific military unit; unit configured packaging facilitated rapid onward movement of commodities to designated deployed units in the JOA
Vignette	A concise narrative description that illustrates and summarizes pertinent circumstances and events from a scenario.

Appendix C
Tasks, Conditions and Standards for the Joint Deployment and Distribution Enterprise (JDDE)

1. General

The tasks, conditions and standards essential to delivering the required capabilities of the joint deployment and distribution enterprise (JDDE) are addressed in this appendix. The appendix is organized to address each element, starting with a Level 5 Operational View (OV-5) that provides a hierarchical schematic indicating the relative relationships of the critical tasks and subtasks. Each OV-5 is followed by a table of enumerated tasks, metrics, conditions, standards, and the JDDE attributes most directly associated with each task. A more complete explanation of the structure and logic of the table structure is contained in subsequent paragraphs.

2. Operational View, Level 5 (OV-5) Diagrams

The OV-5s that are included in this appendix were constructed in accordance with the DOD Architectural Framework (DODAF version 1.0), and are provided as supporting graphics to this appendix. Each OV-5 provides a description of the operational level activities, a general hierarchy, and the inter-relationships of those tasks within each element of the JDDE. Its primary purpose within this joint integrating concept is to provide a foundation for better understanding task relationships. This supports further task level decomposition, identification of task linkages, and recognition of those tasks that appear to be of greater importance in delivering the intended JDDE effects. The numbering convention in each block is consistent with the table numbering scheme in order to provide the reader with a single diagram illustrating the task linkages. Each JDDE element table is preceded by a corresponding OV-5 illustrating the task hierarchy.

3. Tasks, Conditions, and Standards Table Organization

The tables that follow the presentation of each operational level 5 views are organized in the hierarchical fashion depicted in each schematic. The table has multiple columns that address tasks, metrics, conditions, standards, and attributes. Definitions of these terms and their use

within this appendix are included in the glossary appearing in Appendix B to the JL (D) JIC. Specific use of the terms within the tables appears in the paragraphs that follow.

3.1 Tasks. Tasks describe the "what needs to be done" to deliver the desired effects. Those enumerated in this joint integrating concept are essential and enduring tasks cast at the appropriate strategic and operational levels. Many of the tasks selected were drawn directly from other concept documents, or from the CJCSM 3500.04C Universal Joint Task List (UJTL). The list is not exhaustive of all tasks that could be required to deliver the effects. Only directly contributing tasks are included. A broader treatment of the tasks to address either a higher level of detail, or an expansion to include implied tasks would be a part of a Functional Area Analysis that would use this appendix as its primary source document. Each task is numbered to correspond to the element of the JDDE it directly supports. Subtasks retain the parent-child relationship in the numbering scheme.

3.2 Metrics. Each task lists one or more metrics that are used to provide a standard of measure for evaluating the level of success in performing the task. These metrics also have a direct association with the attributes appearing in Section 3.6 "*Attributes of this Joint Integrating Concept*." Although many metrics could be considered in evaluating the tasks, the ones selected for this appendix are those most directly of use in determining the success or failure of task accomplishment, and retain the desired characteristics of being simple, relevant, measurable, and specific.

3.3 Standards. Standards for each task were derived from a careful evaluation of the minimum level of proficiency each would need to be performed to deliver desired effects. These standards are provided without the benefit of refinement in performance level that may occur when evaluated within a specific scenario context or assigned mission. JFCs, depending on specific effects desired at a particular place and time, ultimately define standards.

3.4 Conditions. The conditions, governing the considerations of the environment in which the task will be performed, are those that directly affect the performance of the stated task. The conditions selected for use are uniquely distinguishable, and generally fall into three task environmental categories: physical, military, and civil. Conditions expressed within the context

of this appendix should be evaluated under the framework of "… perform this task under conditions of…." Within the context of this joint integrating concept, thirteen conditions were developed to address high level factors determined to be most directly affecting task performance.

(1) Adverse Weather (High sea states, low visibility, temperature extremes, etc.). Weather conditions considered are those that directly affect the performance of that task within the JDDE. They may affect equipment systems, personnel, organizations, or any of the parts that contribute to the task accomplishment.

(2) Required JRSOI. Conditions that would prohibit the closing of fully capable and readily employable joint forces and means directly to the point of need.

(3) Multiple, simultaneous, distributed, decentralized battles and campaigns. Conditions that describe a non-linear, non-contiguous operational environment that exists throughout the battlespace.

(4) Anti-access environment. Active or passive denial to desired operational areas or points of need from physical, military, or civil perspectives.

(5) Support forces operating in and from austere or unimproved locations. Conditions describing levels of existing infrastructure at locations from which JDDE elements would be operating.

(6) Degraded environments (WMD/WME, CBRNE, Natural disasters). Conditions that are derived from damage sustained within the operational environment directly attributable to external actions.

(7) Increased homeland security threat. Governs the spectrum of conventional or asymmetric threats that could affect JDDE strategic level operations. These could include direct industrial attacks and espionage, increased security that restricts enterprise efficiency, cyber-security, etc.

(8) Multi-national environment. Conditions that govern the ability of the JDDE to function efficiently in operations that involve participation by multi-national or coalition partners, other nations, and host nation activities.

(9) Military culture supportive of JDDE. Conditions that describe the degree of support and cooperation provided by the military departments, Joint Staff, combatant commands, and defense agencies.

(10) Authority and resources availability to enable JDDE initiatives. Conditions addressing the legal, fiscal, and regulatory environment under which the JDDE operates.

(11) Completed TPFDD available. A condition that addresses the required force flow, including locations, dimensional data, and timing desired by the JFC to deliver the operational effects desired at the right time and place.

(12) Absence of pre-existing arrangements. A condition that describes the situation wherein the enterprise is required to dynamically respond to a need that is not served by pre-determined and established contracts, regulations or authority.

(13) Subject to JFC request for JDDE support. Condition that describes a specific request for JDDE support to augment capability directly controlled by the JFC to accomplish missions outside of the established domain or responsibility of the enterprise.

3.5 Attributes. A full description of the attributes that describe the critical characteristics required of the JDDE is contained in Section 3.6 of this joint integrating concept. Attributes are fully testable and measurable, and are directly tied to the metrics and description of each specified task contained within this appendix. Only direct linkages are recognized from the task and its metrics to the attributes. These are indicated by an entry in the applicable attribute blocks. The attributes listed below best describe the critical characteristics required of an effective and efficient JDDE – collectively they serve as a basis for the development of standards that are explicitly linked to mission-essential tasks and supporting tasks.

(1) **Capacity.** The capacity of the JDDE is defined by the physical quantity, size, mix, configuration, and readiness of its assets and infrastructure. Capacity is not a static attribute; it includes the flexibility to expand or contract enterprise elements in response to dynamic mission and requirements changes.

(2) **Visibility**. Visibility is the capability to determine the status, location, and direction of flow for all forces, requirements and materiel in the JDDE. Joint end-to-end visibility is required over operational capabilities and capability packages, organizations, people and things moving through the pipeline. It also includes the organic military mobility forces and commercial augmentation that move people and things through the pipeline, the financial transactions that support them, and the nodes and links comprising the pipeline. Visibility requires the availability of timely, accurate, and usable information essential to the maintenance of a common operating picture within the overall distribution enterprise information network.

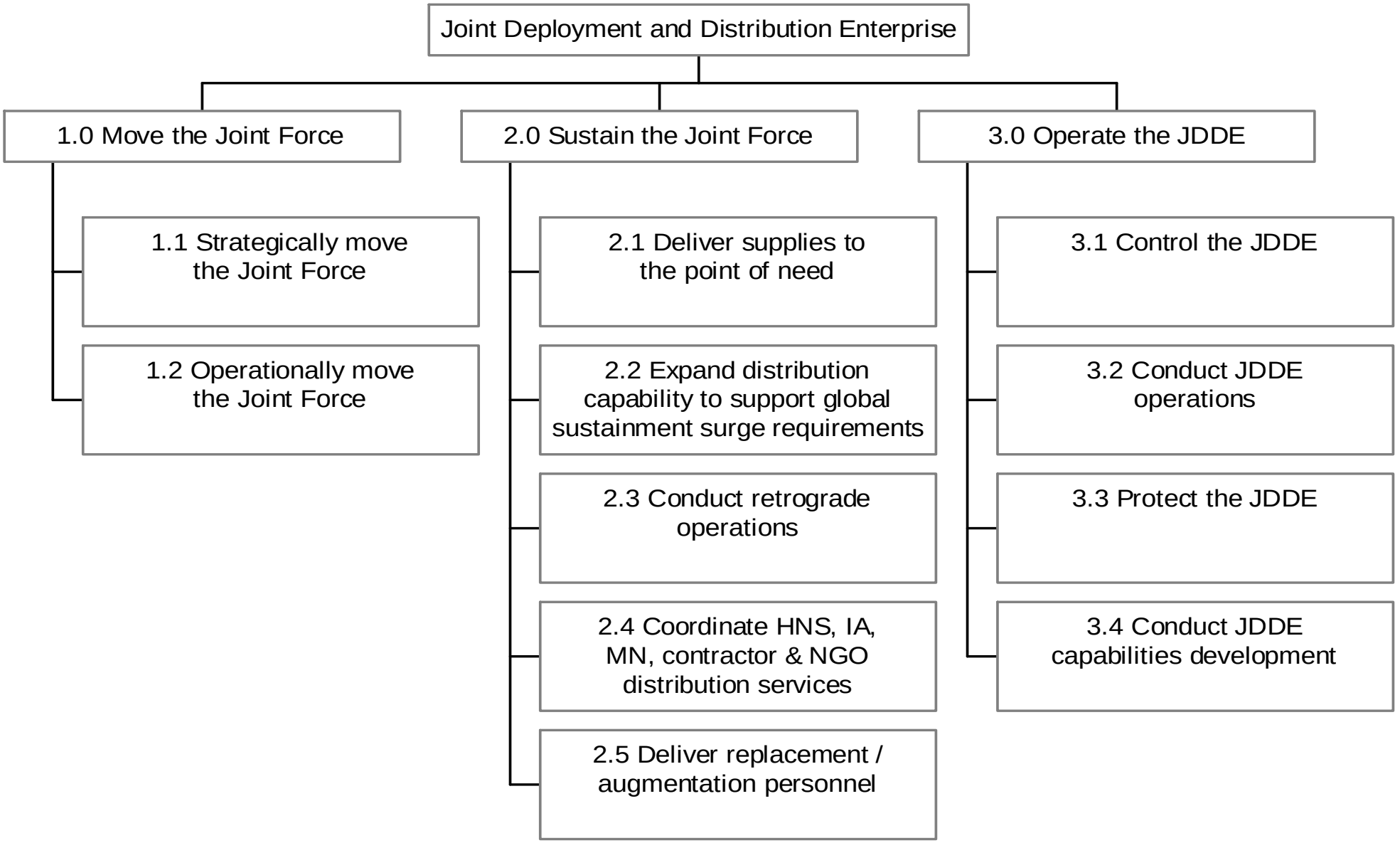
(3) **Reliability**. Reliability is the degree of assurance or dependability that the JDDE will consistently meet its support requirements to specified standards. Reliability instills trust and confidence of the customer in the certainty that the enterprise will meet warfighter demands under clearly established and recognized conditions.

(4) **Velocity**. Velocity is the speed at which requirements are fulfilled by the JDDE. Rapidity is only one aspect of velocity. Requirements must be fulfilled at the right speed. This means that synchronization of the speeds of the various aspects of the distribution process is required in order to maximize effectiveness. Velocity also incorporates the ability of elements of the JDDE to forecast, anticipate, and plan distribution execution. A JDDE that has sufficient velocity meets performance expectations and satisfies mission requirements when and where required by the supported commander's concept of operations.

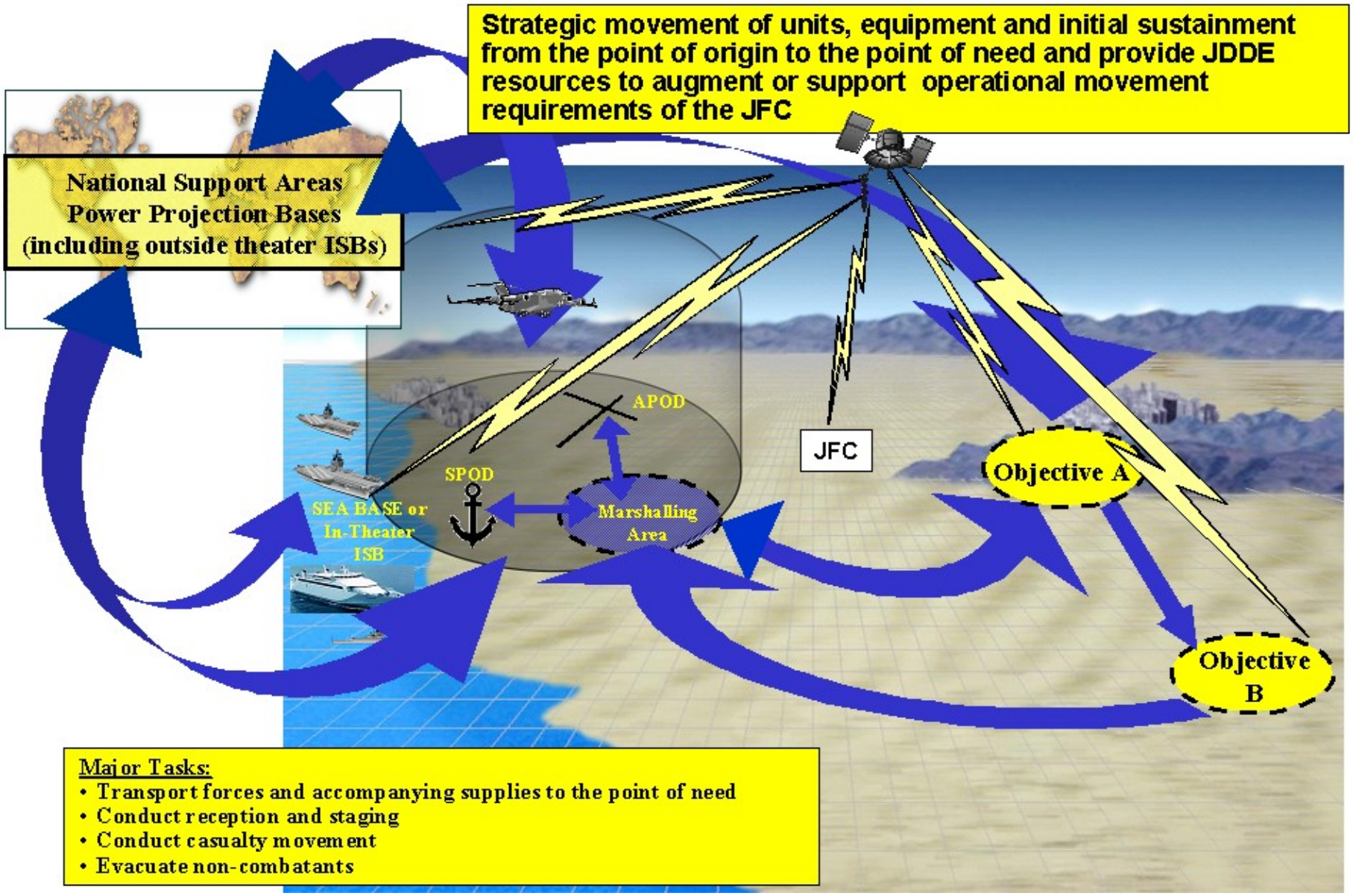
(5) **Precision**. Precision within the JDDE means the accuracy with which delivery of forces, requirements, and materiel occurs at the right time, the right place, and the right

amount. Precision also addresses the ability of the JDDE to minimize deviation from acceptable standards as it reacts to dynamically changing conditions and requirement.

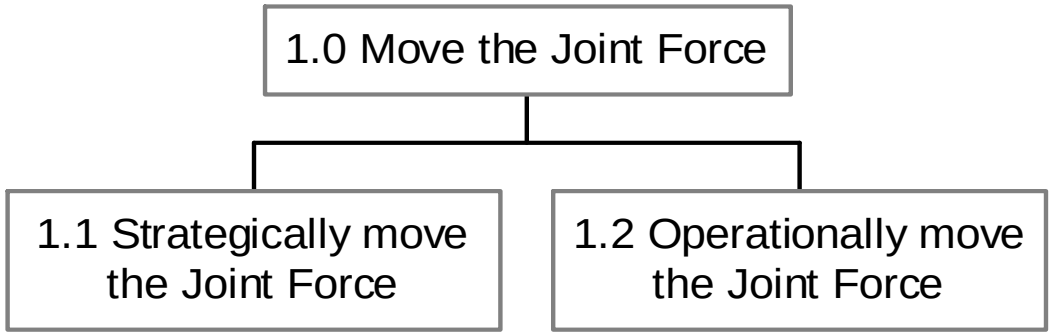
Joint Deployment and Distribution Enterprise



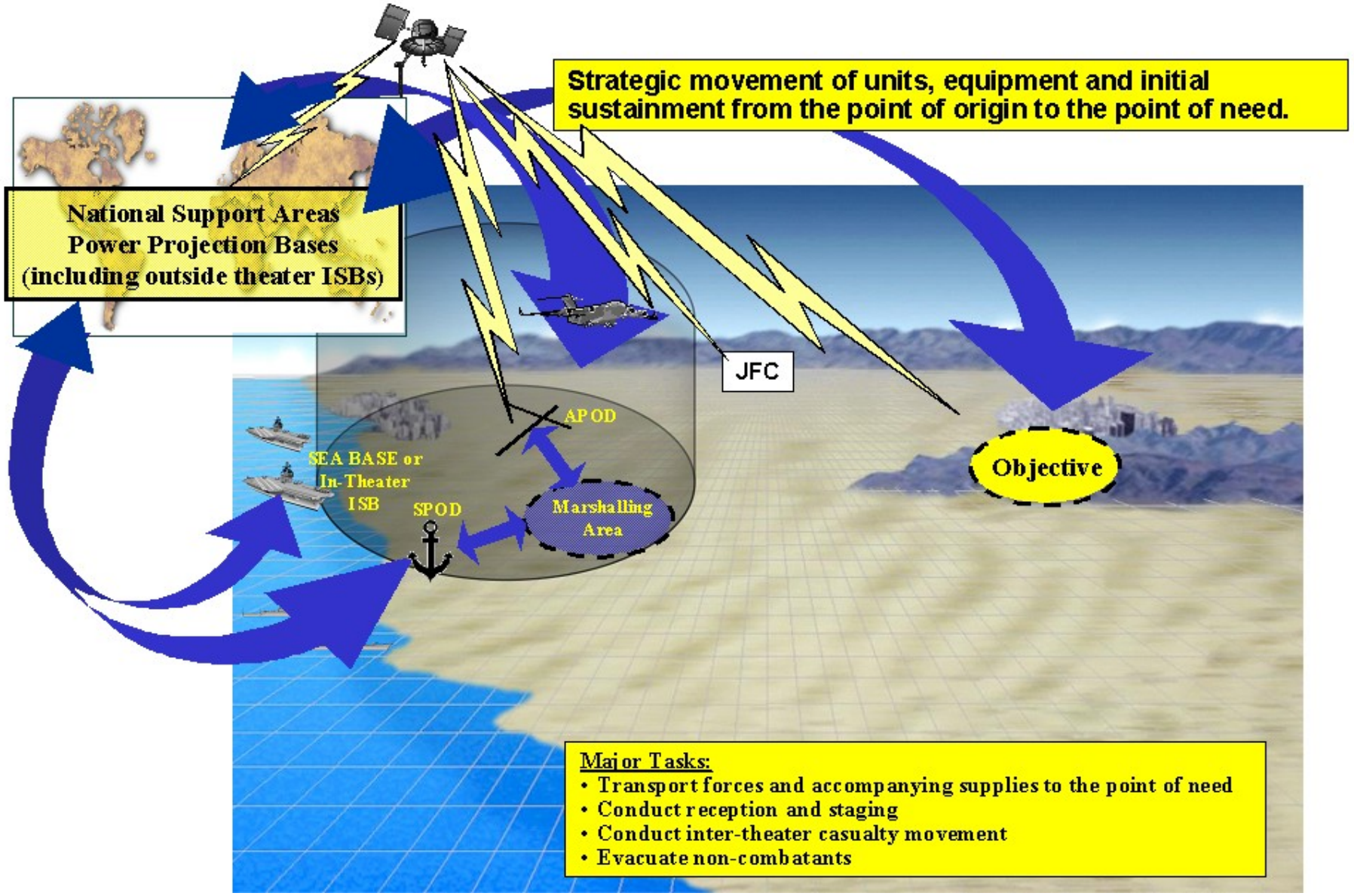
Move the Joint Force Overview



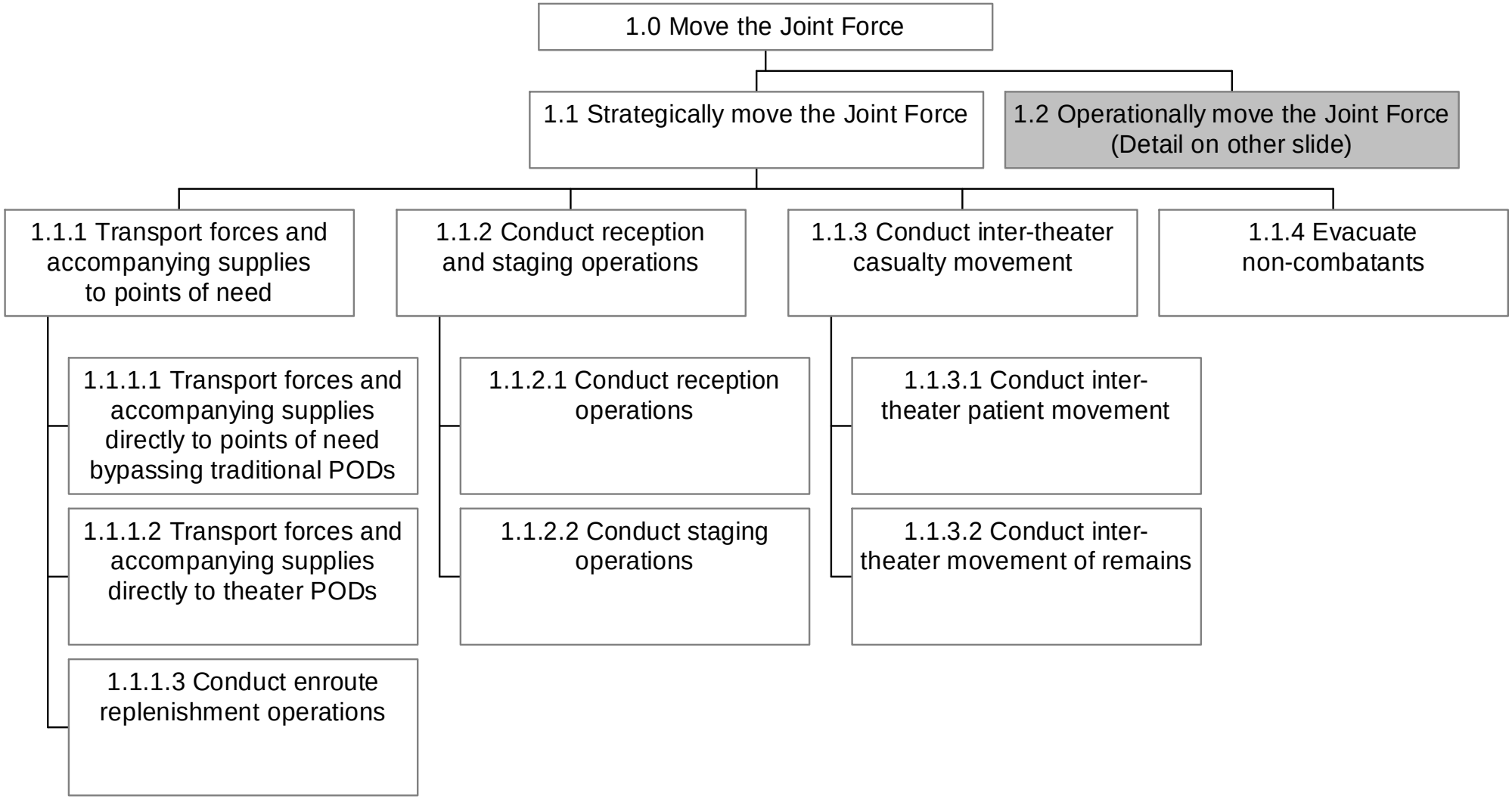
Move the Force



Strategically Move the Joint Force Overview



1.1 Strategically Move the Joint Force

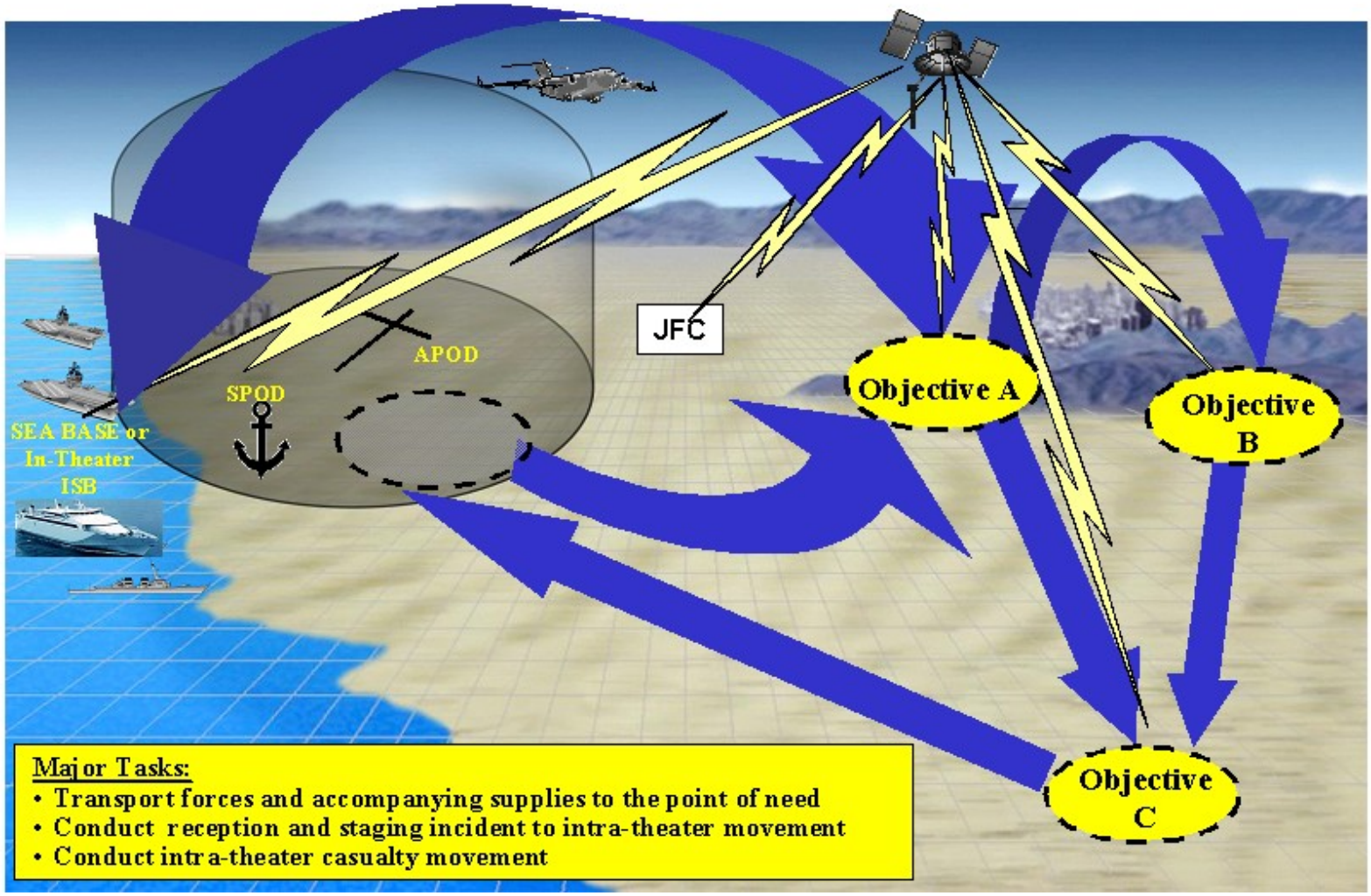


1.1 Strategically Move the Joint Force								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 1.1.1 Transport forces and accompanying supplies to points of need	Percent of required forces delivered with 15 days of supply by RDD in immediately employable configuration Percent of required forces delivered with 15 days of supply by LAD with JRSOI	80% 20%	1, 2, 3, 4, 5, 6, 7, 8, 11	X	X	X	X	
JL(D) JIC 1.1.1.1 Transport forces and accompanying supplies directly to theater designated points of need bypassing traditional PODs	Percent of required forces directly delivered to point of need	100%	1, 2, 3, 4, 5, 6, 7, 8, 11	X				X
JL(D) JIC 1.1.1.2. Transport forces and accompanying supplies directly to theater PODs	Percent of required forces directly delivered to theater PODs	100%	1, 2, 3, 4, 5, 6, 7, 8, 11	X				X
JL(D) JIC 1.1.1.3 Conduct enroute replenishment operations	Percent of enterprise/joint force lift assets replenished, maintained, and properly crewed at levels set by the JDDE	100%	1, 3, 4, 5, 6, 7, 8			X		X
JL(D) JIC 1.1.2 Conduct reception and staging operations	Percent of forces prepared for onward movement	100%	1, 2, 3, 4, 5, 6, 7, 8, 11	X	X			
JL(D) JIC 1.1.2.1 Conduct reception operations	Percent of rated reception throughput achieved	100%	1, 2, 3, 4, 5, 6, 7, 8, 11	X			X	
JL(D) JIC 1.1.2.2 Conduct staging operations	Percent of rated staging throughput achieved	100%	1, 2, 3, 4, 5, 6, 8, 11	X			X	

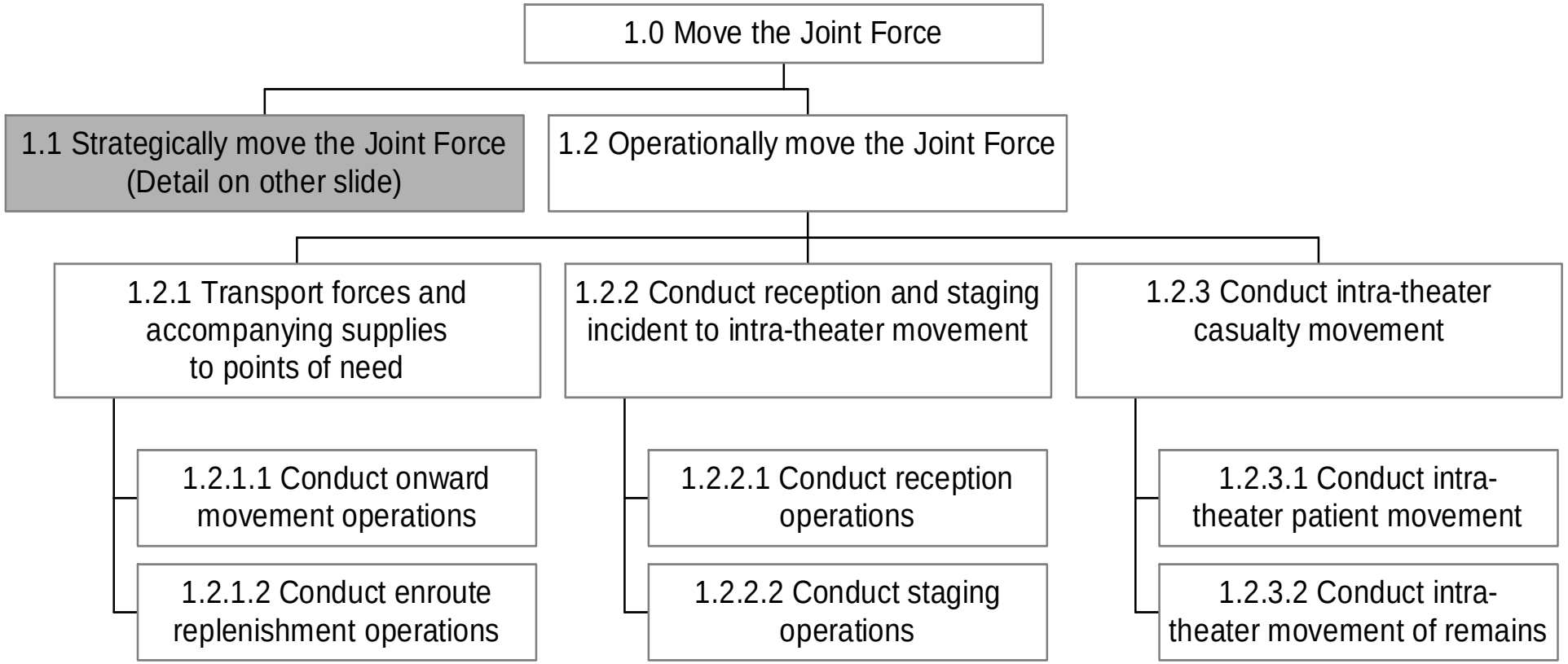
1.1 Strategically Move the Joint Force								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 1.1.3 Conduct inter-theater casualty movement	Hours of delay for casualties awaiting transportation Percent of casualties moved within 24 hours of evacuation decision Percent of casualties that can be tracked through in-transit visibility (ITV)	Less than 24 hours 100% 100%	1, 3, 5, 6, 7, 8		X	X	X	
JL(D) JIC 1.1.3.1 Conduct inter-theater patient movement	Percent of aeromedical evacuees moved within 24 hours of being available for movement out of theater	100%	1, 3, 4, 5, 6, 8	X		X	X	
JL(D) JIC 1.1.3.2 Conduct inter-theater movement of remains	Time to coordinate transportation support to return remains to CONUS Time to evacuate remains to CONUS Percent of remains that can be tracked through in-transit visibility (ITV)	12 hours 24 hours 100%	1, 3, 5, 7, 8		X	X	X	
JL(D) JIC 1.1.4 Evacuate non-combatants	Percent of non-combatants evacuated within completion timeframe	100%	1, 3, 4, 5, 6, 7, 8	X			X	

Operationally Move the Joint Force Overview

Provide JDDE resources to augment or support operational movement requirements of the JFC

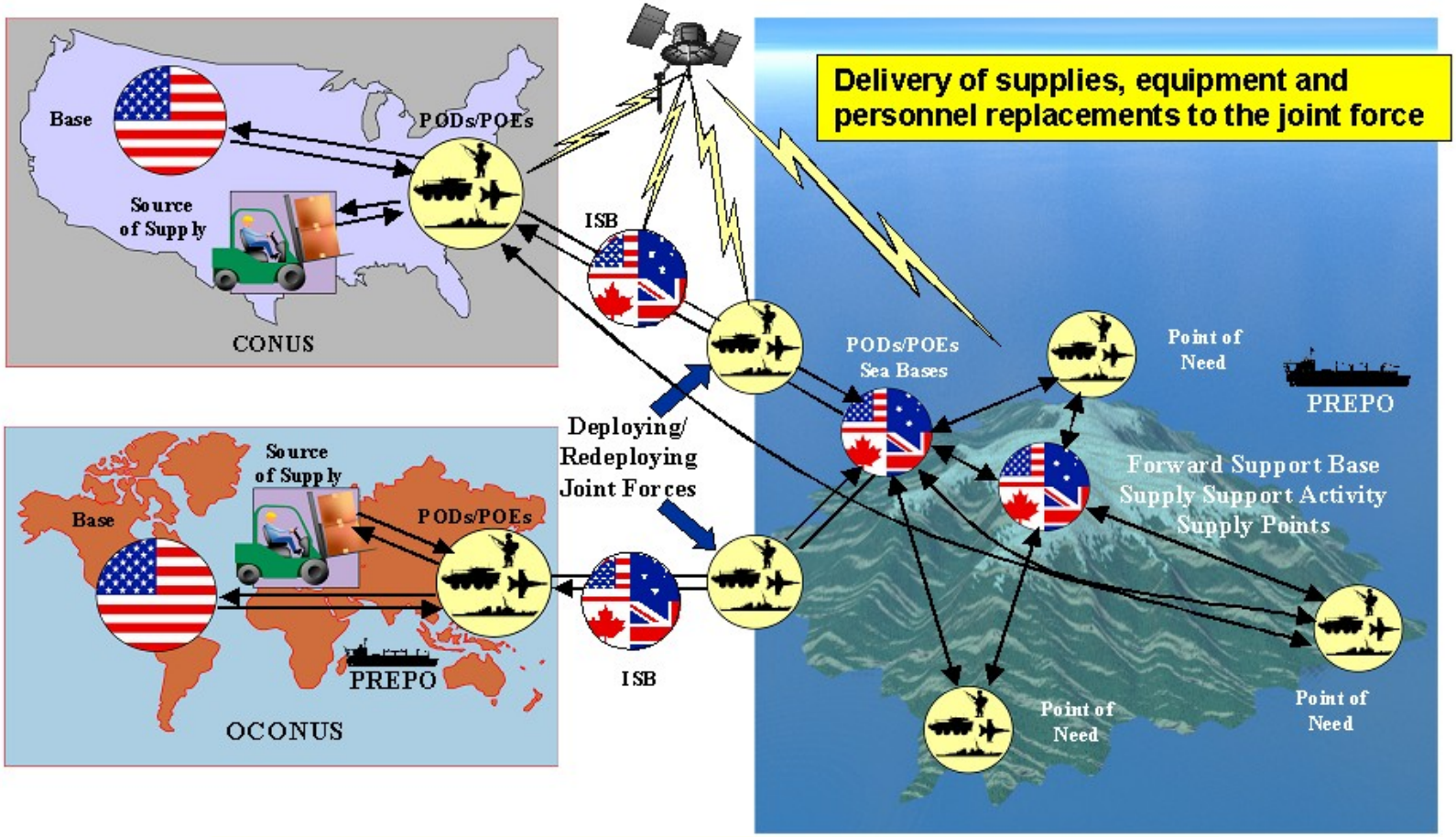


1.2 Operationally Move the Joint Force



1.2 Operationally Move the Joint Force								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 1.2.1 Transport forces and accompanying supplies to points of need	Percent of forces delivered battle-ready within one day of RDD	97%	1, 2, 3, 4, 5, 6, 7, 8, 11, 13	X				X
JL(D) JIC 1.2.1.1 Conduct onward movement operations	Time to provide onward movement assets Percent of onward movement requirement met	24 Hours 97%	1, 2, 3, 4, 5, 6, 8, 11, 13	X			X	
JL(D) JIC 1.2.1.2 Conduct enroute replenishment operations	Percent of JFC enroute replenishment requirements met within 24 hours of JFC notification	100%	1, 2, 3, 4, 5, 6, 8, 13			X		X
JL(D) JIC 1.2.2 Support reception and staging incident to intra-theater movement	Percent of enterprise forces prepared to support reception and staging within 36 hours of JFC notification	100%	1, 2, 3, 4, 5, 6, 8, 13	X	X			
JL(D) JIC 1.2.2.1 Conduct reception operations	Percent of rated reception throughput achieved	100%	1, 2, 3, 4, 5, 6, 7, 8, 11, 13	X				
JL(D) JIC 1.2.2.2 Conduct staging operations	Percent of rated staging throughput achieved	100%	1, 2, 3, 4, 5, 6, 7, 8, 11, 13	X			X	
JL(D) JIC 1.2.3 Conduct intra-theater casualty movement	Hours of delay for casualties awaiting transportation Percent of casualties moved within 24 hours of evacuation decision Percent of casualties that can be tracked through in-transit visibility (ITV)	Less than 24 hours 100% 100%	1, 3, 5, 6, 7, 8		X	X	X	
JL(D) JIC 1.2.3.1 Conduct intra-theater patient movement	Percent of JFC required patient movements that are met within 24 hours of JFC notification	100%	1, 2, 3, 4, 5, 6, 8, 13				X	
JL(D) JIC 1.2.3.2 Conduct intra-theater movement of remains	Time to coordinate transportation support for remains Time to evacuate remains Percent of remains that can be tracked through in-transit visibility (ITV)	12 hours 24 hours 100%	1, 3, 5, 7, 8		X	X	X	

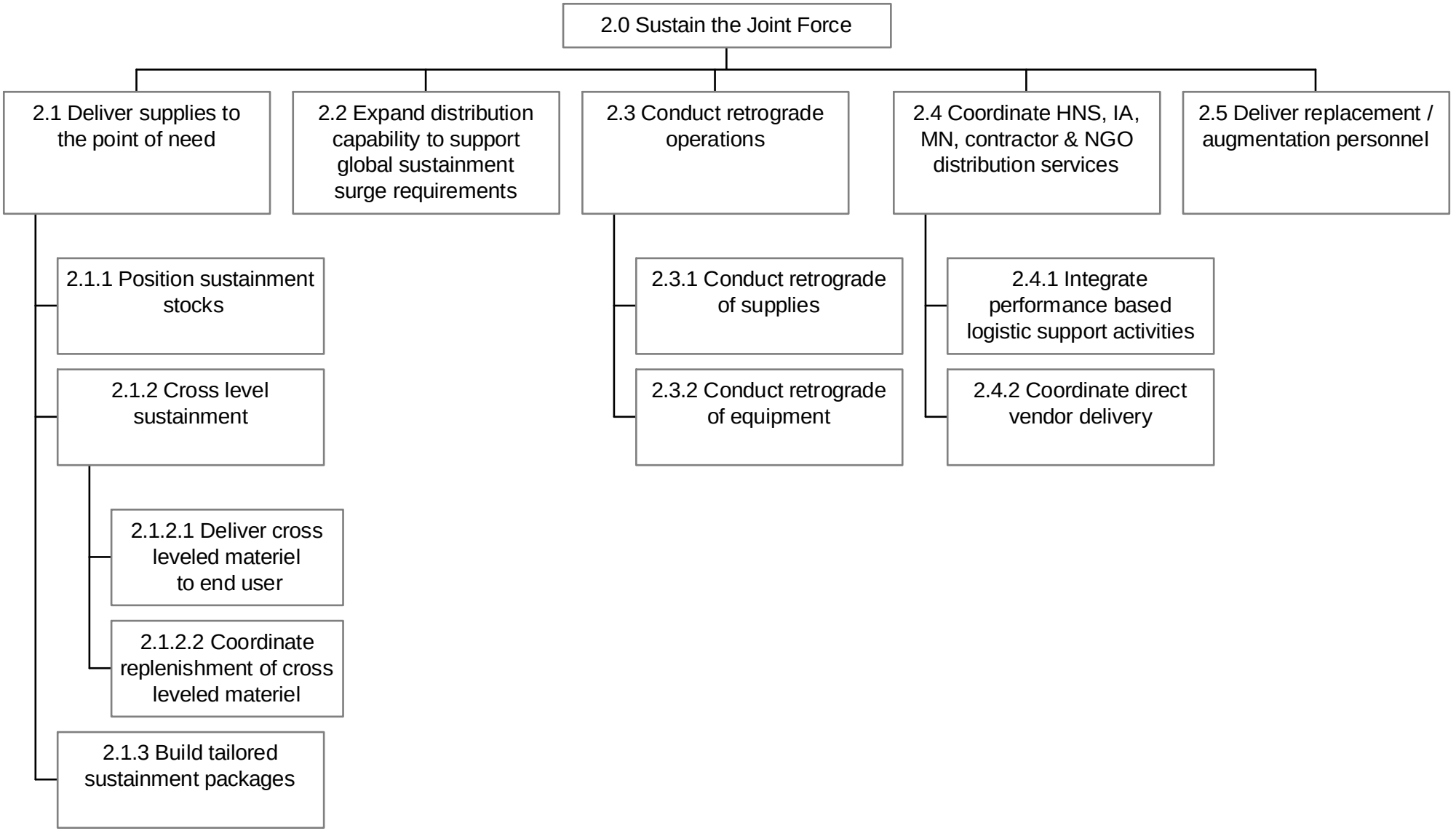
Sustain the Joint Force Overview



Major Tasks:

- Deliver supplies to the point of need
- Expand distribution capability to support global sustainment surge requirements
- Conduct retrograde operations
- Coordinate HNS, IA, MN, contractor & NGO distribution services
- Deliver replacement/augmentation personnel

Sustain the Joint Force

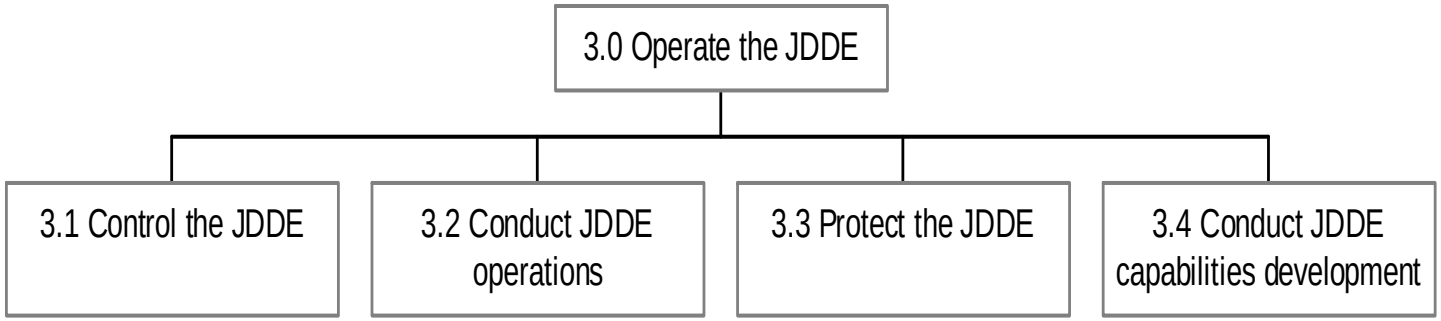


2.0 Sustain the Joint Force								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 2.1 Deliver supplies to the point of need	Percent of all classes of supply accurately delivered to support operational requirements	Emergency resupply will be met within a CWT of 6 hours with a reliability of 97% and an accuracy of 95% to multiple customers Emergency precision delivery to the point of need (e.g. 8 digit MGRS/designated platform for afloat units) Routine resupply will be met with a CWT of 3 days with a reliability rate of 97% and an accuracy rate of 95% to multiple customers	1, 3, 4, 5, 6, 7, 8, 10, 13	X		X	X	X
JL(D) JIC 2.1.1 Position sustainment stocks	Backlog at sustainment nodes Percent of frustrated cargo Percent of visibility of units/cargo for distribution Time to achieve minimum theater supply stock levels Delay due to logistics short falls	No more than 5% of the node's throughput capacity 1% 100% Less than 3 days 0 days	1, 3, 4, 5, 6, 7, 8, 13	X	X		X	
JL(D) JIC 2.1.2 Cross-level sustainment	Time to identify shortfalls and identify potential sources for cross-leveling Time to complete cross-leveling action	3 hours 6 hours	1, 3, 4, 5, 6, 7, 8, 10, 13		X		X	
JL(D) JIC 2.1.2.1 Deliver cross-leveled materiel to end user	Cross-leveled materiel moved to the right time, to the right place, in the right quantity	Emergency precision delivery to the point of need (e.g. 8 digit MGRS/designated platform for afloat units) Emergency cross-leveling will be complete within 6 hours with a reliability of 97% and an accuracy of 95% to multiple customers	1, 3, 4, 5, 6, 7, 8, 13	X	X	X	X	X
JL(D) JIC 2.1.2.2 Coordinate replenishment of cross-leveled materiel	Time to replenish stocks	Routine cross-leveling replenishment will be complete within 3 days with a reliability rate of 97% and an accuracy rate of 95% to multiple customers	1, 3, 4, 5, 6, 7, 8, 13	X	X	X	X	X

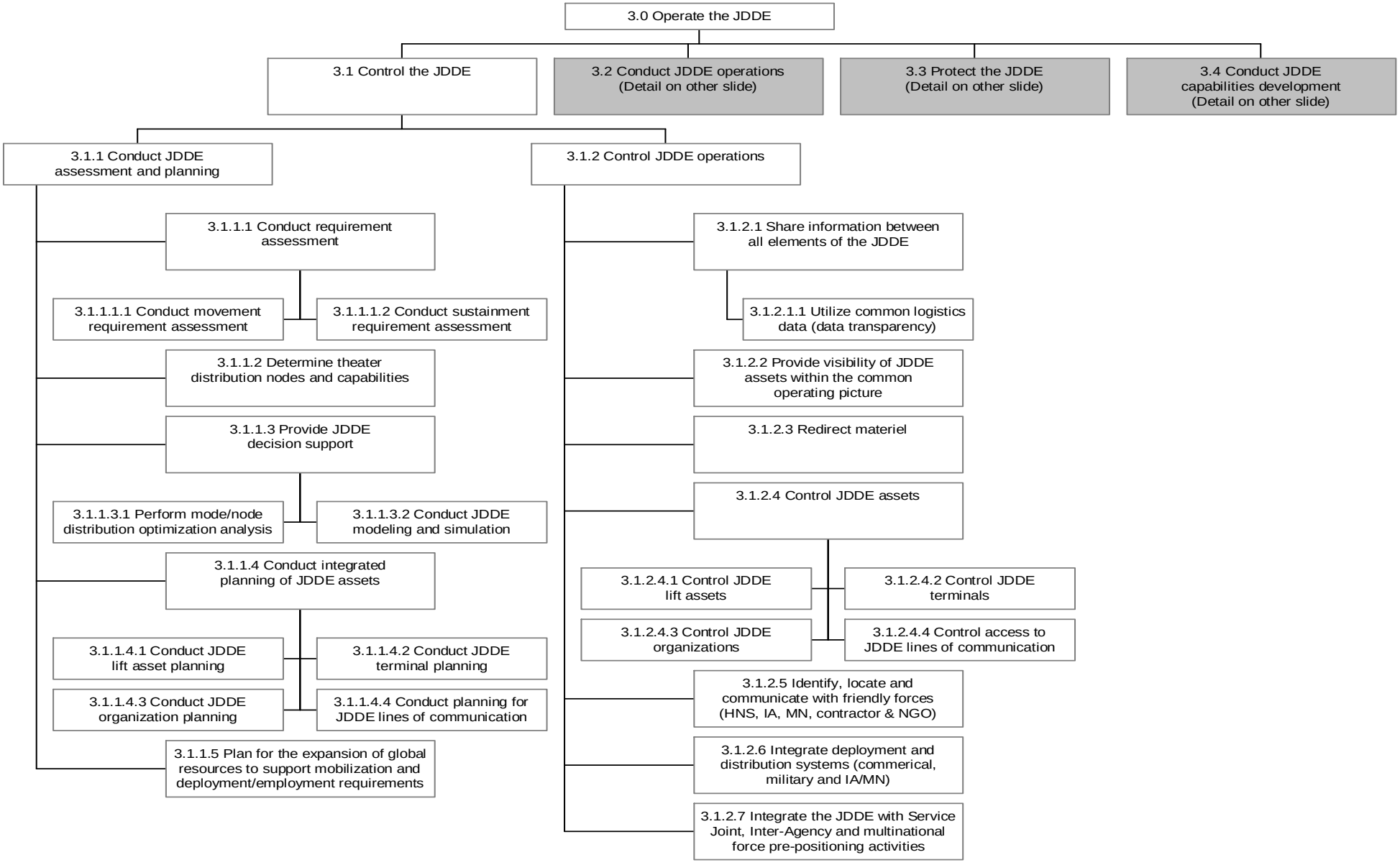
2.0 Sustain the Joint Force								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 2.1.3 Build tailored sustainment packages	Percent of tailored packages not opened until point of need Percent of package items that meet unit requirements Fill rate at the source of supply	95% 97% 95% within 72 hours	1, 3, 5, 6, 7, 8, 10, 13	X	X			X
JL(D) JIC 2.2 Expand distribution capability to support global sustainment surge requirements	Time to initiate expansion to meet requirements Time to establish expanded capabilities	12 Hours 2 Days	1, 3, 4, 5, 6, 7, 8, 10	X	X		X	
JL(D) JIC 2.3 Conduct retrograde operations	Time to return materiel to designated sites Days awaiting retrograde from theater collection points	No more than 5 Days by air No more than 30 Days by sea No more than 3 Days	1, 3, 4, 5, 6, 7, 8, 10, 13	X			X	
JL(D) JIC 2.3.1 Conduct retrograde of supplies	Time to return supplies, (by class of supply), to designated supply distribution centers Days that supplies, (by class of supply), await retrograde from theater collection points	No more than 5 Days by air No more than 30 Days by sea No more than 3 Days	1, 3, 4, 5, 6, 7, 8, 10, 13	X			X	
JL(D) JIC 2.3.2 Conduct retrograde of equipment	Time to return equipment to designated maintenance facilities Days that equipment awaits retrograde from theater collection points	No more than 5 Days by air No more than 30 Days by sea No more than 3 Days	1, 3, 4, 5, 6, 7, 8, 10, 13	X			X	

2.0 Sustain the Joint Force								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 2.4 Coordinate HNS, IA, MN, contractor & NGO distribution services	Percent of sustainment resources available from HNS, IA, MN, contractor & NGO sources have been identified Percent of HNS, IA, MN, contractor, & NGO agreements approved Sustainment requirements identified to be sourced through HNS, IA, MN, contractor & NGO sources that have been met; at the right time (CWT), to the right place, in the right quantity	100% 100% Emergency precision delivery to the point of need (e.g. 8 digit MGRS/designated platform for afloat units) Emergency resupply will be met within a CWT of 6 hours with a reliability of 97% and an accuracy of 95% to multiple customers Routine selected offloads will be met with a CWT of 3 days with a reliability rate of 97% and an accuracy rate of 95% to multiple customers	1, 3, 4, 5, 6, 7, 8, 10, 12, 13	X	X	X	X	X
JL(D) JIC 2.4.1. Integrate performance-based logistic support activities	Percent of PBL support integrated into the distribution and sustainment effort Percent of PBL provided sustainment at the right time, to the right place, in the right quantity	97% 95% of contracts are executed to negotiated standards	1, 3, 4, 5, 6, 7, 8, 10, 13	X	X	X	X	X
JL(D) JIC 2.4.2 Coordinate direct vendor delivery	Percent of direct vendor delivery requirements integrated into the distribution and sustainment effort Percent of direct vendor delivery requirements at the right time, to the right place, in the right quantity	97% 95% of direct vendor delivery contracts are executed to negotiated standards	1, 3, 4, 5, 6, 7, 8, 13		X	X	X	X
JL(D) JIC 2.5 Deliver replacement/augmentation personnel	Percent of personnel delivered by required delivery date	97%	1, 3, 4, 5, 6, 7, 8, 13			X	X	

Operate the JDDE



3.1 Control the JDDE



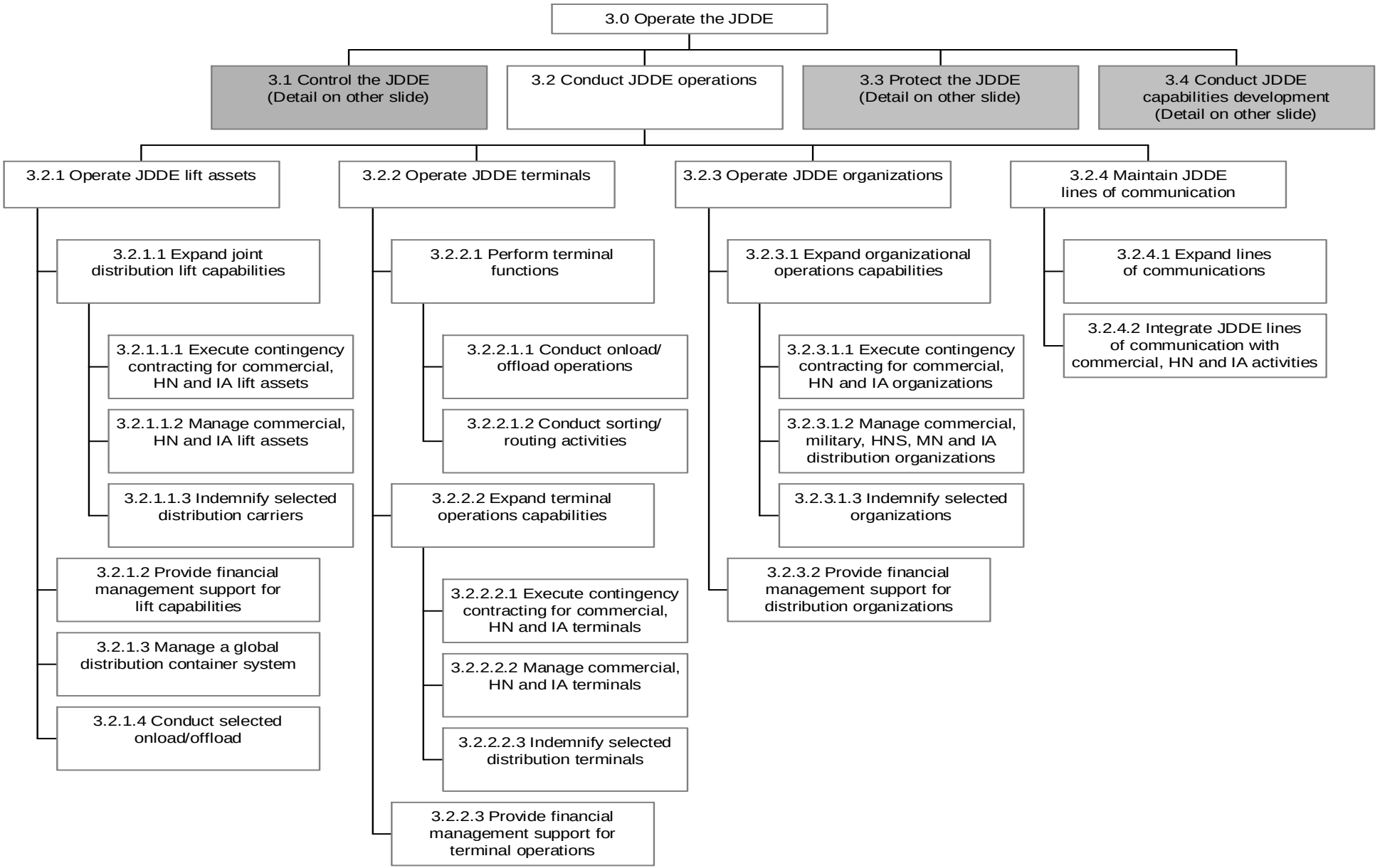
3.1 Control the JDDE								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 3.1.1 Conduct JDDE assessment and planning	Time to perform a JDDE assessment Time to develop a JDDE plan	IAW JFC assessment timelines IAW JFC planning timelines	3, 7, 8, 11				X	X
JL(D) JIC 3.1.1.1 Conduct requirement assessment	Percent of requirements assessed prior to planning Percent of plans delayed due to assessment	100% Less than 1%	3, 7, 8, 11		X		X	X
JL(D) JIC 3.1.1.1.1 Conduct movement requirement assessment	Percent of movement requirements assessed prior to planning Percent of plans delayed due to assessment	100% Less than 1%	3, 7, 8, 11		X		X	X
JL(D) JIC 3.1.1.1.2 Conduct sustainment requirement assessment	Percent of sustainment requirements assessed prior to planning Percent of plans delayed due to assessment	100% Less than 1%	3, 7, 8, 11		X		X	X
JL(D) JIC 3.1.1.2 Determine theater distribution nodes & capabilities (friendly/enemy)	Time to determine the number of sustainment related distribution nodes (friendly/enemy) Time to determine the capabilities of each of the sustainment related distribution nodes (friendly/enemy) Percent of published distribution capability data verified as correct Time to establish JDDE TPFDD Time to complete end-to-end deployment and distribution plan feasibility analysis	Initial determination in 12 hours Initial determination in 24 hours 95% 12 hours 24 hours	3, 7, 8, 11		X	X	X	

3.1 Control the JDDE								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 3.1.1.3 Provide JDDE decision support	Time to provide all relevant data to support the JDDE decision process	24 hours	3, 7, 8, 11		X		X	
JL(D) JIC 3.1.1.3.1 Perform mode/node distribution optimization analysis	Percent of mode/nodes that are part of the analysis Time to complete mode/node optimization analysis	99% 4 hours	3, 4, 5, 6, 7, 8, 11	X		X	X	
JL(D) JIC 3.1.1.3.2 Conduct JDDE modeling and simulation	Time to define problem, assemble and validate data, construct or modify model, verify models, validate models, and conduct analyses	6 hours	3, 7, 8, 11	X		X	X	
JL(D) JIC 3.1.1.4 Conduct integrated planning of JDDE assets	Time to review and validate enterprise requirements Time to provide deployment & redeployment risk assessments and options	24 Hours 24 Hours	3, 7, 8, 11			X	X	
JL(D) JIC 3.1.1.4.1 Conduct JDDE lift asset planning	Time to develop lift asset plans Percent of initial plans requiring revision	24 Hours Less than 5%	3, 7, 8, 11			X	X	
JL(D) JIC 3.1.1.4.2 Conduct JDDE terminal planning	Time to develop terminal plans Percent of initial plans requiring revision	24 Hours Less than 5%	3, 7, 8, 11		X	X	X	
JL(D) JIC 3.1.1.4.3 Conduct JDDE organization planning	Time to develop organizational plans Percent of initial plans requiring revision	24 Hours Less than 5%	3, 7, 8, 11			X	X	
JL(D) JIC 3.1.1.4.4 Conduct planning for JDDE lines of communication	Time to develop LOC plans Percent of initial plans requiring revision	24 Hours Less than 5%	3, 7, 8, 11			X	X	
JL(D) JIC 3.1.1.5 Plan for the expansion of global resources to support mobilization and deployment/employment requirements	Percent of plans including expansion requirements for mobilization and deployment/redeployment Months since last review of plan for expansion of resources to support mobilization and deployment/redeployment	100% 12 Months	3, 7, 8, 11			X	X	

3.1 Control the JDDE								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 3.1.2 Control JDDE Operations	Percent of the JDDE operations conducted according to JDDE plans	100%	3, 5, 6, 7, 8, 11			X		X
JL(D) JIC 3.1.2.1 Share information among all elements of the JDDE	Percent of JDDE personnel participating in communities of interest Percent of JDDE elements networked	100% 100%	3, 5, 6, 7, 8	X	X			
JL(D) JIC 3.1.2.1.1 Utilize common logistic data (data transparency)	Percent of logistics data common to all JDDE participants	100%	3, 5, 6, 7, 8		X			
JL(D) JIC 3.1.2.2 Provide visibility of JDDE assets within the common operational picture	Percent of TAV Percent of JDDE assets reporting information to the COP Percent of required users that have access to relevant portions of the COP	100% 100% 100%	3, 5, 6, 7, 8		X			
JL(D) JIC 3.1.2.3 Redirect materiel	Percent of materiel redirected Time to redirect materiel Delay in materiel delivery due to redirection operations	As required by JFC or JDDE Less than 4 hours Less than 4 hours	1, 2, 3, 4, 5, 7, 8		X	X	X	

3.1 Control the JDDE								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 3.1.2.4 Control JDDE assets	Percent of the JDDE covered by established rules and processes	100%	3, 7, 8, 11		X		X	
JL(D) JIC 3.1.2.4.1 Control JDDE lift assets	Percent TAV of lift assets Hours delay in operations due to lift assets Percent of required lift capacity available	100% Less than 24 hours 100%	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	X	X		X	
JL(D) JIC 3.1.2.4.2 Control JDDE terminals	Time for terminals to reach full operating capability Percent of terminal capacity utilized Percent TAV of cargo at terminal Percent of terminal operations conducted within TPFDD timeline	IAW TPFDD Within 10% of planned operating capacity 100% 100%	1, 2, 3, 4, 5, 6, 7, 8, 9, 11	X	X		X	
JL(D) JIC 3.1.2.4.3 Control JDDE organizations	Percent manning of JDDE organizations Hours to achieve control of all JDDE organizations Percent of required organizations established	90% Less than 24 hours 100%	1, 2, 3, 4, 5, 6, 7, 8, 9, 12		X		X	
JL(D) JIC 3.1.2.4.4 Control access to JDDE lines of communication	Percent reduction in LOC capacity due to enemy action or unplanned event Percent of required LOC capacity available Hours to restore LOC following interruption	10% for no more than 24 hours 100% Less than 24 hours	1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12	X	X		X	
JL(D) JIC 3.1.2.5 Identify, locate, and communicate with friendly forces (HNS, IA, MN, contractor & NGO)	Percent of required force identified and located Percent of required force with established communications	100% 100%	1, 3, 5, 6, 7, 8		X			
JL(D) JIC 3.1.2.6 Integrate deployment & distribution systems (commercial, military, and IA/MN)	Percent of deployment and distribution systems integrated	100%	3, 5, 6, 7, 8, 11		X			X
JL(D) JIC 3.1.2.7 Integrate the JDDE with Service, Joint, Interagency and Multi-national force pre-positioning activities	Percent of pre-positioning activities integrated	100%	3, 4, 5, 6, 7, 8, 11		X			X

3.2 Conduct JDDE Operations

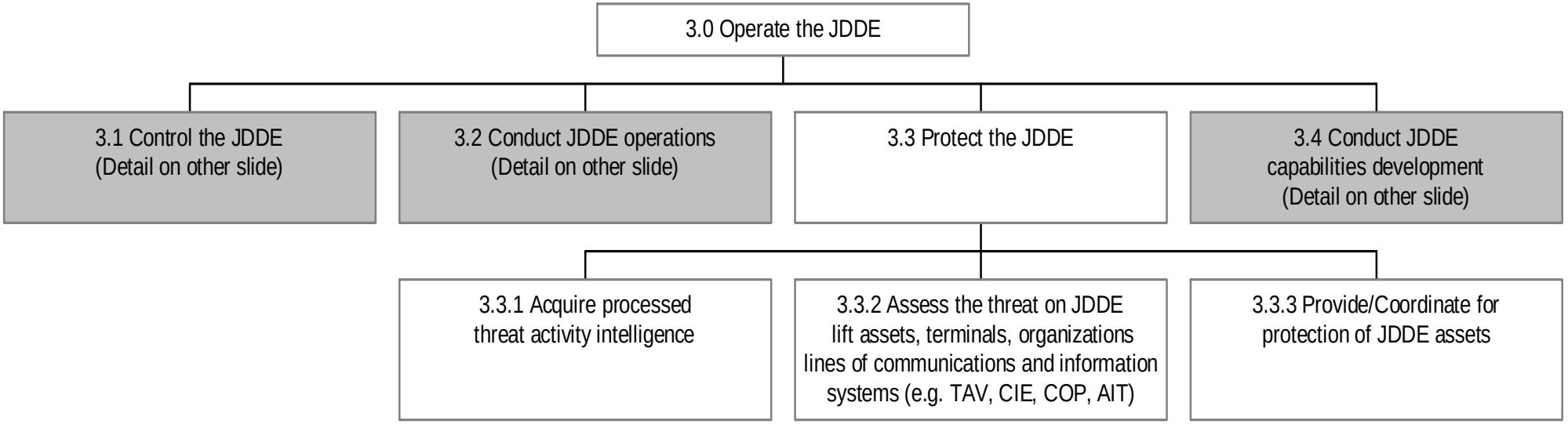


3.2 Conduct JDDE Operations								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 3.2.1 Operate JDDE lift assets	Percent of required lift assets ready to meet operational requirements	100%	1, 2, 3, 4, 5, 6, 8, 9, 10, 11	X	X	X	X	X
JL(D) JIC 3.2.1.1 Expand joint distribution lift capabilities	Time to initiate lift expansion to meet requirements Time to establish expanded lift capabilities	12 Hours 5 Days	2, 3, 4, 5, 6, 8, 11	X		X	X	
JL(D) JIC 3.2.1.1.1 Execute contingency contracting for commercial, host-nation, and inter-agency lift assets	Percent of commercial, host-nation, and inter-agency contracts approved Time to execute a contingency contract for lift assets	100% 5 Days	2, 3, 4, 5, 6, 8, 11	X			X	
JL(D) JIC 3.2.1.1.2 Manage commercial, host-nation, and inter-agency lift assets	Percent of required lift capabilities available to execute movements	95%	1, 2, 3, 4, 5, 6, 8, 11	X	X			X
JL(D) JIC 3.2.1.1.3 Indemnify selected distribution carriers	Percent of selected distribution carriers indemnified	100%	3, 5, 6, 7, 8	X				
JL(D) JIC 3.2.1.2 Provide financial management support for lift capabilities	Time to secure funding sources for JDDE lift operations Percent of required lift operations funding obtained	5 Days 100%	3, 5, 6, 7, 8, 11		X		X	
JL(D) JIC 3.2.1.3 Manage a global distribution container system	Percent of TAV of containers Percent of containers positioned to meet JFC requirements	100% 100%	2, 3, 4, 5, 6, 8, 11	X	X			X
JL(D) JIC 3.2.1.4 Conduct selected onload/offload	Time to load/unload lift platforms	IAW standards for lift asset	1, 2, 3, 4, 5, 6, 8	X		X	X	

3.2 Conduct JDDE Operations								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 3.2.2 Operate JDDE terminals	Percent of required terminals ready to meet operational requirements	100%	1, 2, 3, 4, 5, 6, 8, 9, 10, 11	X	X	X	X	X
JL(D) JIC 3.2.2.1 Perform terminal operations	Aggregate throughput capacity (short tons/day, pax/day, pieces/day, gallons/day) Aggregate square feet / cubic feet of storage capacity Backlog at nodes The percent of CWT for items attributable to processing at terminals	100% of TPFDD requirements 100% of TPFDD requirements No more than 5% of the node's throughput capacity 5%	1, 2, 3, 4, 5, 6, 8, 11	X	X	X	X	X
JL(D) JIC 3.2.2.1.1 Conduct onload/offload operations	Time to load/unload lift platforms	IAW standards for lift asset	1, 2, 3, 4, 5, 6, 8	X		X	X	
JL(D) JIC 3.2.2.1.2 Conduct sorting/routing activities	Percent of incorrectly sorted items The percent of CWT for items attributable to sorting activities	1% 2%	1, 2, 3, 4, 5, 6, 8		X	X	X	X
JL(D) JIC 3.2.2.2 Expand terminal operations capabilities	Time to initiate expansion to meet requirements Time to establish expanded capabilities	12 Hours 2 Days	1, 2, 3, 4, 5, 6, 8, 11	X		X	X	
JL(D) JIC 3.2.2.2.1 Execute contingency contracting for commercial, host-nation, and inter-agency terminals	Percent of commercial, host-nation, and inter-agency contracts approved Time to execute a contingency contract for terminals	100% 2 Days	3, 5, 6, 7, 8	X			X	
JL(D) JIC 3.2.2.2.2 Manage commercial, host-nation, and inter-agency terminals	Percent of terminal capacity available for JDDE use	100% of negotiated level	2, 3, 4, 5, 6, 8, 11	X	X			
JL(D) JIC 3.2.2.2.3 Indemnify selected distribution terminals	Percent of selected distribution terminals indemnified	100%	3, 5, 6, 7, 8, 10	X				
JL(D) JIC 3.2.2.3 Provide financial management support for terminal operations	Time to secure funding sources for JDDE terminal operations Percent of required terminal operation funding obtained	2 Days 100%	3, 5, 6, 7, 8, 9, 10		X		X	

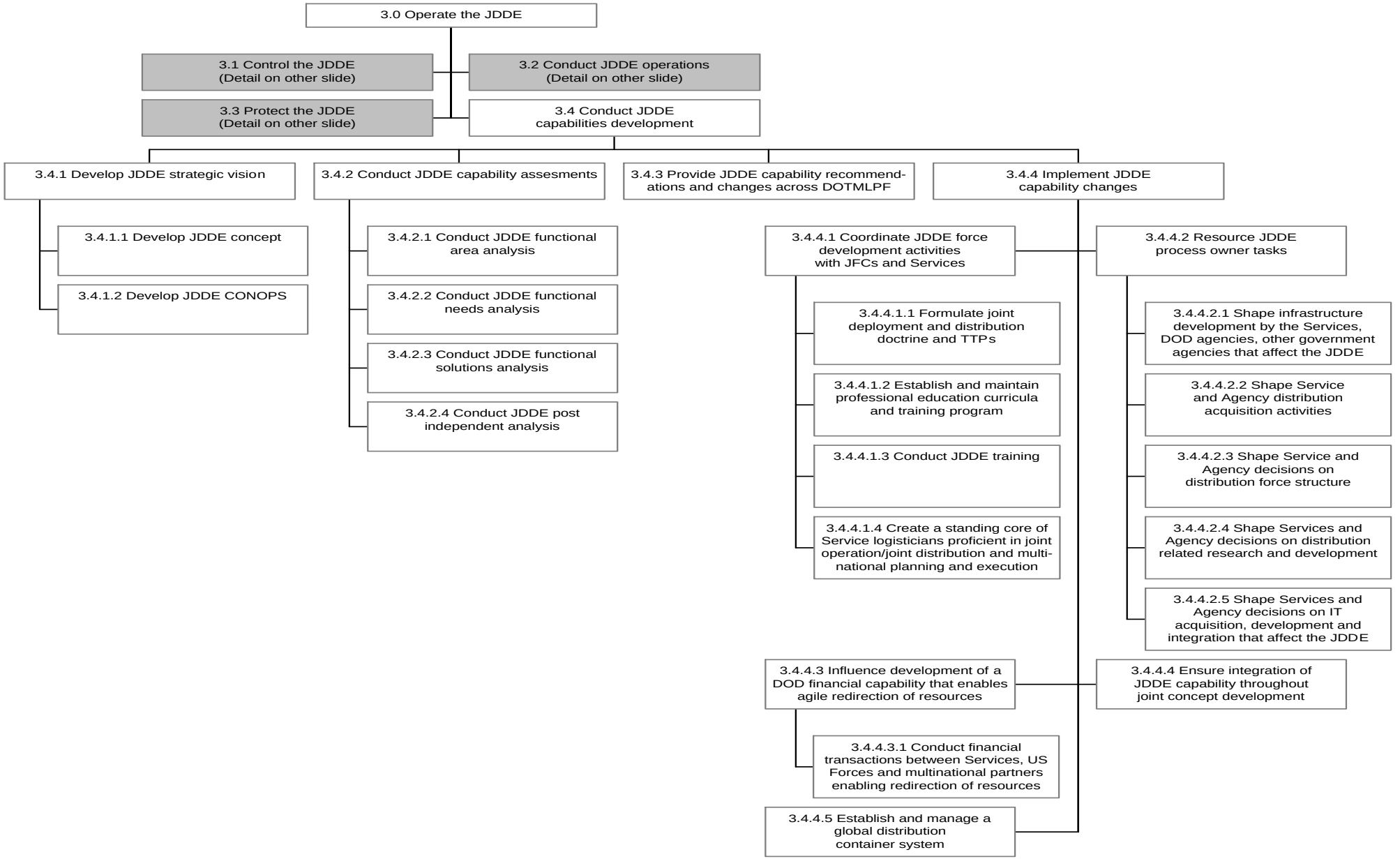
3.2 Conduct JDDE Operations								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 3.2.3 Operate JDDE organizations	Time to employ organizations' capabilities from notification	2 Days	1, 2, 3, 4, 5, 6, 8, 9, 10, 11	X		X	X	
JL(D) JIC 3.2.3.1 Expand organizational operations capabilities	Time to initiate expansion to meet requirements Time to establish expanded capabilities	12 Hours 2 Days	1, 2, 3, 4, 5, 6, 8, 11	X	X	X	X	
JL(D) JIC 3.2.3.1.1 Execute contingency contracting for commercial, host-nation, and inter-agency organizations	Percent of commercial, host-nation, and inter-agency contracts approved Time to execute a contingency contract for organizations	100% 5 Days	2, 3, 4, 5, 6, 8, 10	X			X	
JL(D) JIC 3.2.3.1.2 Manage commercial, military, HNS, MN, IA distribution organizations	Percent of organizations' negotiated capabilities available for use by the JDDE	100%	2, 3, 4, 5, 6, 8	X	X	X		
JL(D) JIC 3.2.3.1.3 Indemnify selected organizations	Percent of selected organization indemnified	100%	3, 5, 6, 7, 8, 10	X				
JL(D) JIC 3.2.3.2 Provide financial management support for organizations	Time to secure funding sources for JDDE organizations Percent of required organizational funding obtained	5 Days 100%	3, 5, 6, 7, 8, 9, 10		X		X	
JL(D) JIC 3.2.4 Maintain JDDE Lines of Communication	Percent of required LOCs maintained to meet operational requirements	100%	1, 2, 3, 4, 5, 6, 8, 11	X	X	X	X	X
JL(D) JIC 3.2.4.1 Expand lines of communication	Time to initiate expansion to meet requirements Time to establish expanded capabilities	12 Hours 2 Days	1, 2, 3, 4, 5, 6, 8, 11	X		X	X	
JL(D) JIC 3.2.4.2 Integrate JDDE lines of communication actions with commercial, host-nation, and inter-agency activities	Time for JDDE LOC requirements to be synchronized before movement Percent of JDDE LOC requirements synchronized before movement	2 hours 100%	1, 2, 3, 4, 5, 6, 8, 11		X		X	

3.3 Protect the JDDE



3.3 Protect the JDDE								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 3.3.1 Acquire processed threat activity intelligence	Time to acquire processed threat activity intelligence	2 hours	1, 3, 4, 5, 6, 8		X		X	
JL(D) JIC 3.3.2 Assess the threat on JDDE lift assets, terminals, organizations, lines of communication and information systems (e.g. TAV, CIE, COP, AIT)	Time to assess threat activity impact	2 hours	1, 3, 4, 5, 6, 8		X		X	
JL(D) JIC 3.3.3 Provide/Coordinate for protection of JDDE assets	Percent of JDDE infrastructure protected Time to provide/coordinate protection	100% IAW with JDDE plans	1, 3, 4, 5, 6, 7, 8, 9, 11	X	X		X	

3.4 Conduct JDDE Capabilities Development



3.4 Conduct JDDE Capabilities Development								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 3.4.1 Develop JDDE strategic vision	JDDE strategic vision developed (Yes/No)	Strategic vision approved	9, 10	X	X	X	X	X
JL(D) JIC 3.4.1.1 Develop JDDE concept	JDDE concept developed (Yes/No)	Concept approved	9, 10	X	X	X	X	X
JL(D) JIC 3.4.1.2 Develop JDDE CONOPS	JDDE CONOPS developed (Yes/No)	CONOPS approved	9, 10	X	X	X	X	X
JL(D) JIC 3.4.2 Conduct JDDE capability assessments	JDDE capability assessments conducted (Yes/No)	IAW JCIDS process	9, 10	X	X	X	X	X
JL(D) JIC 3.4.2.1 Conduct JDDE function area analysis (FAA)	Identify tasks, conditions and standards	100%	9, 10	X	X	X	X	X
JL(D) JIC 3.4.2.2 Conduct JDDE functional needs analysis (FNA)	Identify gaps, redundancies and shortfalls	100%	9, 10	X	X	X	X	X
JL(D) JIC 3.4.2.3 Conduct JDDE functional solutions analysis (FSA)	Identify solutions	100%	9, 10	X	X	X	X	X
JL(D) JIC 3.4.2.4 Conduct JDDE post independent analysis (PIA)	Analysis complete	100%	9, 10	X	X	X	X	X
JL(D) JIC 3.4.3 Provide JDDE capability recommendations and changes across DOTMLPF	Percent of DOTMLPF areas considered	100%	9, 10	X	X	X	X	X
JL(D) JIC 3.4.4 Implement JDDE capability changes	Percent of changes implemented	100%	9, 10	X	X	X	X	X
JL(D) JIC 3.4.4.1 Coordinate JDDE force development activities with JFCs and Services	Percent of JDDE force development activities mapped to JFCs and Service plans	100%	9, 10	X	X	X	X	X
JL(D) JIC 3.4.4.1.1 Formulate joint deployment and distribution doctrine, and tactics, techniques and procedures (TTPs)	Percent of proposed/changed doctrine and TTPs accepted	100%	9, 10	X	X	X	X	X
JL(D) JIC 3.4.4.1.2 Establish and maintain professional education curricula and training program	Percent of the JDDE education requirements covered in the curricula and training program	100%	9, 10	X	X	X	X	X
JL(D) JIC 3.4.4.1.3 Conduct JDDE training	Student throughput	As necessary to fill JDDE logistician billets	9, 10	X	X		X	
JL(D) JIC 3.4.4.1.4 Create a standing core of Service logisticians proficient in joint operations/joint distribution and multi-national planning & execution	Percent of designated JDDE logistician billets that are filled with JDDE certified logisticians Percent of Service logisticians JDDE certified	100% 33%	9, 10	X	X	X		

3.4 Conduct JDDE Capabilities Development								
Task List	Metrics	Standards	Conditions	Capacity	Visibility	Reliability	Velocity	Precision
JL(D) JIC 3.4.4.2 Resource JDDE process owner tasks	Percent of process owner tasks resourced	100%	9, 10		X			
JL(D) JIC 3.4.4.2.1 Shape infrastructure development by the Services, DOD Agencies, other government agencies that affect the JDDE (BRAC, base expansion, construction etc…)	Percent of JDDE infrastructure improvement initiatives resourced in programmatic documents	100%	9, 10		X			
JL(D) JIC 3.4.4.2.2 Shape Service and Agency distribution acquisition activities (QDR, PPBE, ….)	Percent of JDDE acquisition needs resourced in programmatic documents	100%	9, 10		X			X
JL(D) JIC 3.4.4.2.3 Shape Service and Agency decisions on distribution force structure (QDR, PPBE, ….)	Percent of JDDE force structure needs resourced in programmatic documents	100%	9, 10		X			
JL(D) JIC 3.4.4.2.4 Shape Services and Agency decisions on distribution related research and development	Percent of JDDE R&D needs resourced in programmatic documents	100%	9, 10		X			
JL(D) JIC 3.4.4.2.5 Shape Service and Agency decisions on information technology acquisition, development, and integration that affects the JDDE	Percent of JDDE Information Technology needs resourced in programmatic documents	100%	9, 10		X			
JL(D) JIC 3.4.4.3 Influence development of a DOD financial capability that enables agile redirection of resources	Financial system capability developed (Yes/No)	Yes	9, 10		X	X		
JL(D) JIC 3.4.4.3.1 Conduct financial transactions between Services, US Forces and multi-national partners enabling redirection of resources	Time to effect financial transaction	Near Real-Time	5, 6, 8, 9, 10		X	X	X	X
JL(D) JIC 3.4.4.4 Ensure integration of JDDE capability throughout joint concept development	Percent of joint concepts that integrate JDDE capabilities during development	100%	9, 10		X			
JL(D) JIC 3.4.4.5 Establish and manage a global distribution container system	Global distribution container system established (Yes/No) Percent fill of JDDE containers inventory percent of containers visible within the JDDE container system	Yes 100% 100%	3, 5, 6, 7, 8, 9, 10	X	X			X

Appendix D

Scenario, Intelligence, Illustrative CONOPS (Provided Separately)

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Appendix E

Mapping of Capabilities from Source Documents to JL (D) JIC Tasks

Legend

Joint Logistics (Distribution) JIC Task #'s

1.0 Move the Joint Force
- 1.1 Strategically move the joint force
- 1.2 Operationally move the joint force

2.0 Sustain the Joint Force
- 2.1 Deliver supplies to point of need
- 2.2 Expand distribution capability to support global sustainment surge requirements
- 2.3 Conduct retrograde operations
- 2.4 Coordinate HNS, IA, MN, contractor and NGO distribution services
- 2.5 Deliver replacement and augmentation personnel

3.0 Operate the JDDE
- 3.1 Control the JDDE
- 3.2 Conduct JDDE operations
- 3.3 Protect the JDDE
- 3.4 Conduct JDDE capabilities development

Source	Source Capabilities/Tasks	Maps to JD JIC Task #
National Military Strategy of the United States of America 2004	**Deploying and Sustaining Military Capabilities** [pg. 15]. 1. Ability to support forces operating in and from austere or unimproved forward locations. 2. Networking to create a seamless end-to-end system. 3. Logistics system that synchronizes all aspects of the deployment and distribution processes. 4. Robust sealift, airlift, aerial refueling and pre-positioned assets. 5. Supporting equipment to store, move and distribute materiel Information infrastructure to provide real-time visibility of the entire logistics chain.	 1.2, 2.1, 3.2 3.1 3.0 1.1, 1.2, 3.2 3.1, 3.2
MCO [Ver. .11 dtd Sept 2004]	**Capabilities** [pg. 58]. **4.D Focused Logistics Capabilities.** **4.D.1** Establish and operate an adaptive, elastic, and ubiquitous distribution-based sustainment system, along with the requisite informational architecture, so that agile and dispersed forces do not	 3.1, 3.2, 3.4

Source	Source Capabilities/Tasks	Maps to JD JIC Task #
	outrun or lose their ability to request and receive time-definite support, with customer wait time measured in minutes and hours, not days and weeks.	
	4.D.2 Establish a joint sustainment force that is rapidly deployable, fully capable, immediately employable, flexible, highly mobile, modular, tailored, networked, survivable, and responsive to supported forces.	1.1, 1.2, 2.1, 2.2, 2.4, 2.5, 3.1, 3.2, 3.3, 3.5
	4.D.3 Maintain persistent deployment, employment, and sustainment situational awareness, and achieve shared understanding at multiple echelons (to include coalition partners), enabled by a coherently joint logistics common relevant operational picture, a reliable information and communications network, and automated decision tools in order to anticipate, predict, plan collaboratively, synchronize, and satisfy deployment and sustainment requirements that occur throughout a campaign.	3.1
	4.D.4 Project and sustain forces when the adversary is competent and determined, strategic and theater lines of communication are not secure, access through fixed seaports and airfields in the battlespace is denied, and supported forces are widely dispersed in the battlespace.	1.0, 2.0,3.0
	4.D.5 Reduce the need for sustainment pauses, enabled by improved commonality, reliability, maintainability, sustainability, and survivability in order to conduct relentless operations. Collaboratively, synchronize, and satisfy deployment and sustainment requirements that occur throughout a campaign.[8]	1.0, 2.0, 3.0
JFEO Capabilities [Ver. .92A3 dtd 15 Sept 2004]	**4.A.4 Focused logistics capability** [pg. 44].	
	4.A4.a Deliver and sustain the joint forcible entry operations force, in all weather conditions, to objectives independent of existing infrastructure, from remote and austere bases; from sea bases; and across strategic and operational distances.	1.0, 2.1, 2.4, 2.5

[8] Designing in integrated logistics support criteria in support of weapon acquisition is outside the scope of the JL (D) Joint Integrating Concept, other elements apply.

Source	Source Capabilities/Tasks	Maps to JD JIC Task #
	4.A.4.b Rapidly deploy the joint forcible entry force across the global battlespace, with little or no RSOI constraints, and transition to immediate employment in the objective area.	1.1
	4.A.4.c Provide a dynamic planning, tasking and execution process that supports the force flow and sustainment of the force.	3.1, 3.4
	4.A.4.d Seamlessly and rapidly reconstitute or reconfigure joint forcible entry forces and sustain operations.	1.0, 2.1, 2.3, 2.4, 2.5
	4.A.4.e Establish additional contingency airfields or ports, or significantly increase the existing throughput capacity.	2.2, 3.2
	4.A.4.f Reduce supply and re-supply demands through weapon systems with increased precision, effectiveness, firepower and reliability.[9]	3.4
	4.A.4.g Recognize and rapidly apply technological advances that reduce the demand for all classes of supply in order to enhance joint forcible entry operations: e.g., reduce demand on fossil fuels, miniaturization of ordinance, etc.[10]	3.4
	4.A.4.h Provide what is needed, where it is needed, and when it is needed, to distributed forces through enhanced capabilities such as predictive logistics, reach-back, improved throughput systems and precise delivery systems.	1.0, 2.0, 3.0
	4.A.4.i Rapidly treat, stabilize and evacuate casualties.[11]	1.1, 1.2, 3.2
JOpsC Capabilities [Ver. 2.0 dtd 23 July 2004]	**Common Core Capabilities of the Future Joint Force** [pg. 33].	
	4.A. Achieve common understanding of all dimensions of the battlespace throughout the Joint Force.	3.1
	4.D. Rapidly deploy selected portions of the Joint Force that can immediately transition to execution, even in the absence of developed infrastructure.	1.1
	4.G. Conduct deployment and sustainment activities in support of multiple simultaneous, distributed, decentralized battles and campaigns.	1.0, 2.0, 3.0
Global Strike [Draft Ver. 28 dtd Oct 2004]	**Capabilities** [pg. C-3].	
	Posture forces (forces and facilities).	1.0
	Position forces to engage (maneuver).	1.0

[9] See footnote 1 on ILS criteria.
[10] Ongoing Science & Technology initiatives are outside the scope of this concept.
[11] Evacuation task only is addressed by this concept.

Source	Source Capabilities/Tasks	Maps to JD JIC Task #
	Recover and regenerate forces.	1.2, 2.3, 2.4, 2.5, 3.2
Command and Control JIC [Ver. .85 dtd 3 June 2005]	**3.4 Enduring C2 Principles** [pg. 13].	
	3.4.1 Unity of Command/Effort.	3.1
	3.4.2 Authority and Accountability of Commanders.	3.1
	3.4.3 The Principle of the Offensive.	1.0
IAMD JIC [Ver. 2.3 dtd 17 Sept 2004]	9.1 Integrate End-to-End deployment and distribution information systems.	3.1
	9.1.1 Develop a Single Deployment System that is responsive to Joint Forces/Organizations.	1.0, 2.0, 3.0
	9.1.2 Develop a Single Distribution System that is responsive to Joint Forces/Organizations.	1.0, 2.0, 3.0
	9.2 Develop a Joint Logistics Common Operating Picture.	3.1, 3.4
	9.2.1 Ensure a complete and accurate Asset Visibility (AV)/In-transit Visibility (ITV) picture.	3.1, 3.4
	9.2.2 Integrate and synchronize sustainment information systems into one battle command information system (Universal Common Operating Picture).	3.1, 3.4
	9.3 Establish a joint interdependent, globally synchronized sustainment capability (supply, distribution, maintenance, transportation, civil engineer, medical).[12]	2.0, 3.0
	9.3.1 Integrates strategic and theater distribution as well as supply and transportation functions in order to provide seamless distribution to support JFCs.	1.0, 2.0, 3.0
	9.3.2 Collect, interpret and manage Logistics Data.	3.1
	9.3.4 Assess Friendly Force logistics and Host Nation Support Capabilities.	3.1, 3.3
	9.4 Establish and manage interdependent regional distribution capabilities embedded within each supported Joint Force Command.	2.0, 3.0
	9.5 Develop viable alternatives to sustain joint forces tasked to conduct distribution operations throughout non-linear and non-contiguous battle spaces with inherently unreliable Global Lines Of Communication (GLOC).	3.0
	9.6 Establish common logistics protocols:	
	9.6.1 Develop unit or Service configured loads at CONUS	1.0, 2.0, 3.0

[12] Maintenance, engineering and medical (other than evacuation) are not addressed in this concept.

Source	Source Capabilities/Tasks	Maps to JD JIC Task #
	depots to the greatest extent practicable.	2.1, 3.2
	9.6.1.1 Enable each joint Service element to be able to deploy with sufficient sustainment to conduct initial operations (Specify a specific number of days for initial operations).	1.1. 2.1
	9.7 Plan and configure Joint Logistics sustainment packages that begin and continue simultaneously with deployment, employment and sustainment of the Joint Force.	2.0
	9.7.1 Optimize inter-theater and intra-theater lift, in order to achieve the means of immediate and uninterrupted support, especially during distributed operations in JOAs surrounded by enemy controlled territory.	1.0, 3.0
	9.8 Conduct continued top-down analysis to identify logistics redundancies.	3.1
	9.8.1 Organize/re-engineer strategic and intermediate support-basing capabilities.	3.1, 3.2
	9.8.1.1 Enhance propositioned afloat assets with common sustainment commodities to support Joint Forces.	1.0, 2.1, 2.2
	9.8.1.2 Design to support deployed forces in unit sets and tailored for specific mission configurations.	2.0
	9.9 Ensure common interoperability across Service logistics organizations, equipment and supplies	1.0, 2.0, 3.0
	9.9.2 Conduct Joint Reception, Staging, Onward movement and Integration (JRSOI).	1.0, 3.2
	9.9.3 Provide Medical Evacuation.	1.0
Focused Logistics Joint Functional Concept [Ver. 1.0 dtd Dec 2003]	**Required Capabilities to meet Joint Deployment/Rapid Distribution Challenge** [Appendix B, pg. 40]	
	• Capability to support mobility requirements, across the range of military operations, with DOD organic mobility forces and commercial augmentation in the right numbers and types, supported by a robust infrastructure	1.0, 3.0
	• Capability to optimize rapid projection, delivery, and handoff of joint forces and sustainment assets worldwide	1.0, 2.0, 3.0

Source	Source Capabilities/Tasks	Maps to JD JIC Task #
	• Capability to distribute required forces and sustainment at the place and time required	1.0, 2.0, 3.0
	• Capability to support rapid force maneuver within the joint or combined operations area	1.1, 2.1
	• Capability to return forces to the sea base or home station for regeneration and reconstitution	1.2, 2.1, 2.3, 2.5, 3.1, 3.2
	• Capability for deployment and distribution processes and their enabling business practices and systems to share necessary data and information and to interoperate, both vertically and horizontally from the strategic to the tactical levels	3.1
	Required Capabilities to meet Agile Sustainment Challenge	
	• Capability for sustaining organizations to meet routine and surge requirements	1.0, 2.0. 3.0
	• Capability to tailor sustainment, which includes both logistics support packages (with supply requirements automatically generated, assessed, and sourced from military or commercial inventories) and deploying logistics organizations (with potential sources of support forces automatically identified and tailored)	2.1, 2.4, 3.1, 3.2
	• Capability to perform precision tactical resupply, including—but not limited to—delivery by airdrop, precision aerial delivery, or airland[13]	2.1
	• Capability to collaborate and interoperate across all Services, enabled by common metrics, standards, and processes	2.0, 3.1
	• Capability to collaborate with the civilian sector to take advantage of advanced business practices, commercial economies, and global nonmilitary networks	2.4, 3.1
	• Capability to Integrate and synchronize contractor logistics support, host nation support, and executive agents	2.4, 3.1, 3.2

[13] JD Enterprise enables tactical resupply and only provides strategic or operational distribution to tactical sites at the direction of the supported commander.

Source	Source Capabilities/Tasks	Maps to JD JIC Task #
	• Capability to remotely monitor and diagnose system health and to report and anticipate failures and consumption—and thus to anticipate demand—associated with current, modernized, and transformed weapons systems[14]	2.1, 3.1
	Required Capabilities to meet Operational Engineering Challenge[15]	
	• Capability to provide effective, efficient, responsive, tailored engineer support for meeting combatant commander and warfighter operational and time requirements	1.0, 2.1, 3.1, 3.2
	• Capability to perform rapid logistics assessments and contingency planning, enabling combat service support forces to be tailored to reduce strategic lift requirements, and minimizing footprint in the joint or combined operations area	3.1
	Required Capabilities to meet Multi-national Logistics Challenge	
	• Capability to optimize logistics operations across and among all echelons, alliances, coalitions, and host nations	2.1, 2.2, 2.4, 3.1, 3.2
	• Capability for agencies to interoperate, particularly in foreign disaster relief and stability operations	2.4, 3.1
	Required Capabilities to meet Logistics Information Fusion Challenge	
	Capability to operate in a net-centric environment, including	
	• A robust, end-to-end information grid	3.1, 3.4
	• Assured communications	3.1, 3.4
	• DOD net centric enterprise services, such as:	3.1
	• Universal transaction services	3.1
	• Distributed environment support	1.0, 2.0, 3.0
	• High assurance of services	1.0, 2.0, 3.0
	• Capability for robust, agile, and survivable logistics infrastructure to withstand both kinetic and directed information warfare attacks	3.3
	• Capability to exercise real-time, end-to-end control of the entire acquisition, deployment, distribution, and sustainment pipeline—from mobilization, deployment, employment, reconstitution, regeneration, redeployment, and demobilization, and across the entire logistics spectrum	3.1

[14] Important task, but JDD Enterprise not responsible for implementation outside its own equipment.

[15] JDD Enterprise will enable operational engineering by rapid distribution, but will not perform engineering tasks.

Source	Source Capabilities/Tasks	Maps to JD JIC Task #
	• Capability to capture timely, accurate, interoperable source data	3.1
	• Capability to make high-quality data available for processing and presentation applications	3.1
	• Capability to turn available data into "actionable" information through enhanced asset visibility, control, and management decision support tools	3.1
	• Capability to visually depict complex information in a manner that allows commanders and staff to quickly and efficiently assimilate the volumes of data and information pertaining to their respective areas of responsibility	3.1
	• Capability to monitor logistics support plan execution—through trigger processes or plan sentinels at key nodes or links in the pipeline—to identify and react rapidly to deviations from the selected plan	3.1
	• Capability to synchronize, prioritize, direct, redirect, integrate, and coordinate common-user and cross-Service logistics commodities and functions	1.0, 2.0, 3.0
	• Capability for logistics systems to interoperate and provide visualization and decision support tools that the combatant commander or JTF commander can use for managing logistics assets and processes in the area of operations	3.1
	• Capability for logisticians and operators at the supporting and supported combatant commander or JTF level to collaborate fully among themselves and with their counterparts at the component level, and with interagency and coalition partners	3.1
Net-Centric Joint Functional Concept [Ver. 0.5, dtd 1 Oct 2004] pg. 43	**Ability to Maintain/Survive**	
	• Detect and defend against logical attack	3.1, 3.3
	• Dynamically re-route services	3.1, 3.2
	• Degrade gracefully and contain cascade failures	3.1, 3.3
	• Continue essential operations in degraded environments (WMD/WME, Natural disasters)	3.3
	• Prioritize data flows from key databases/backups (mirrors)	3.1
	• Acquire additional network resources on demand	3.1
	Ability to Provide Network Services	
	• Connect with all assets	3.1

Source	Source Capabilities/Tasks	Maps to JD JIC Task #
	• Connect and share information among interagency/coalition/commercial/NGO players	3.1
	• Easily search, file, transfer, communicate, support network taxonomy	3.1
	• Archive large volumes of data	3.1
	• Inform/update chain of command of network status	3.1
	• Support separate constellations of COIs	3.1, 3.4
	• Support geographically transitioning nodes	3.1
Seabasing JIC Capabilities [Ver. .67 dtd 3 Nov 2004] pg. 44	**APPENDIX C – Table of Mission Specific Capabilities** Rapidly position scalable and tailorable, employable joint force packages at sea within the JOA to seize the initiative, including:	1.0, 2.0, 3.0
	• Rapidly maneuver and/or position in-theater joint forces to conduct joint operations at sea or on land	1.2
	• Rapidly reposition other joint force capabilities outside the JOA in support of joint Seabasing operations	1.2
	• Provide synchronized integrated strategic and operational air/sea lift to the JOA and sea base	1.0
	• Activate and sortie future joint prepositioned ships and equipment	1.0
	• Receive rapidly deployed joint Flow-In-Echelon (FIE) forces aboard sea base platforms	1.0, 2.0
	• Operate in a Net Centric Environment	1.0, 2.0, 3.0
	• Ability to establish organizational relationships. This is the ability to set and change organizational and command relationships and connectivity in accordance with mission and task needs.	3.1
	• Ability to synchronize actions. The fast pace of Seabasing operations requires that entities be able to rapidly synchronize among them selves, independent of direction from superiors.	3.1
	• Ability to share substantial awareness and understanding.	3.1

Source	Source Capabilities/Tasks	Maps to JD JIC Task #
	• Ability to operate interdependently. The concept of operating interdependently extends joint operations benefits further by employing the network (both human and technical) to allow a virtually limitless combination of Service unique capabilities at the tactical level to create capabilities not previously achievable.	1.0, 2.0, 3.0
	• Conduct en route collaborative preparation, planning, virtual rehearsal, and simulation in support of employment, including IPB with reach back to national, theater and multi national nodes.	3.1
	• Rapidly transfer cargo/equipment/supplies/personnel on and among sea base platforms, MSC and commercial shipping through sea state 4, including:	2.0, 3.1, 3.2
	• Provide efficient and effective material handling systems.	3.2
	• Selectively offload/onload cargo/equipment/supplies to/from platforms and surface/air connectors, including:	3.2
	• Rapidly organize and tailor joint force packages at sea.	2.1, 2.4, 3.2
	• Efficiently move personnel and equipment within the sea base.	2.5, 3.2
	• Provide strategic, operational, and tactical air and sea lift to support reconfiguration and redistribution of forces within the sea base.	1.2, 2.1, 3.2
	• Support the projection of a brigade sized joint force from other Seabasing forces via other means within a period of darkness from CONUS or Advanced Bases to inland objectives.	1.2, 2.1
	• Provide continual sustainment of joint force operations within the distributed sea base, including:	2.0, 3.1, 3.2
	• Provide at sea resupply of sustainment for designated classes of supply to the sea base.	2.1, 2.4, 2.5, 3.2
	• Establish and maintain minimum allowances (20 DOS)[16] of classes of supply based on expenditures needed to support sea based operations (afloat and ashore) until supply lines are established.	2.0, 3.1, 3.2

[16] JDDE does not specify Service days of supply (DOS) requirements. These will be mission specific.

Source	Source Capabilities/Tasks	Maps to JD JIC Task #
	• Provide joint asset visibility of equipment, personnel and supplies staged within, and in-transit to and from the sea base.	3.1
	• Provide joint integrated operational logistics management.	3.1
	• Expeditiously receive, reconfigure, store, load, transport and distribute supplies and material throughout the sea base.	2.1, 2.3, 2.5, 3.2
	• Enable continual sustainment for joint forces operating ashore, including:	2.0
	• Conduct scalable, selective offload, transfer and distribution of personnel, equipment, material and designated classes of supply from the sea base.	1.2, 2.1, 2.4, 2.5
	• Provide vertical and surface lift to ensure timely distribution of designated classes of supply.	1.2, 2.1
	• Provide for the selective repackaging and flow through of designated supplies and material (trans-shipment).	2.1
	• Evacuate medical casualties to the sea base.	1.2
	• Evacuate patients/casualties from the sea base to outside the JOA.	1.1, 1.2
	• Rapidly regenerate sea based combat capabilities for reemployment.	1.2, 2.1, 2.3, 3.2
	• Recover to the sea base personnel/equipment projected ashore.	1.2, 2.1, 2.3, 2.4, 2.5, 3.2
	• Restore the immediate and rapid response forces' combat capability.	1.2, 2.1, 2.3, 2.4, 2.5, 3.2
	• Maneuver regenerated units at sea within JOA or to another JOA.	1.1
Derived Capabilities	• Financial transparency	3.1, 3.4
	• Host Nation Support Data Base with pre-negotiated agreements.	2.4
	• Joint Funding of common items and services	3.4
	• Automated, classified ability to identify, locate communicate w/friendly forces to include interagency and multi-national partners.	3.1, 3.5
	• Rapidly identify, segregate, sort and assemble shipments for friendly forces.	1.0, 2.1, 3.1
	• Modular, tailorable sustainment packages assembled commercially and delivered directly to user without repackaging that is multi-modal capable.	2.1, 2.4, 3.2, 3.4

Source	Source Capabilities/Tasks	Maps to JD JIC Task #
	• Resupply units with a CWT of X, reliability of X% and an accuracy rate of 99% • Establish, operate, and manage a global distribution container system.	2.0 3.2, 3.4

Appendix F

JDDE Composition, Relationships and Control

1. INTRODUCTION

At the 20 October 2005 JROC, the Joint Logistics (Distribution) Joint Integrating Concept developers were directed to posit a solution on controlling the Joint Deployment and Distribution Enterprise (JDDE - the Enterprise). They were also tasked to more clearly define the Enterprise composition, address Enterprise relationships, and describe Enterprise control. Accordingly, this appendix was developed in response to that tasking -- to provide a baseline for the conduct of the Capabilities Based Assessment (CBA). The posited solution contained herein is the JROC-approved, posited solution to serve as the underpinning for the CBA. It describes how USTRANSCOM, as the Defense Distribution Process Owner (DPO) will exercise control of the Enterprise through coordination and synchronization to achieve the effects articulated in the central idea of this Joint Integrating Concept.

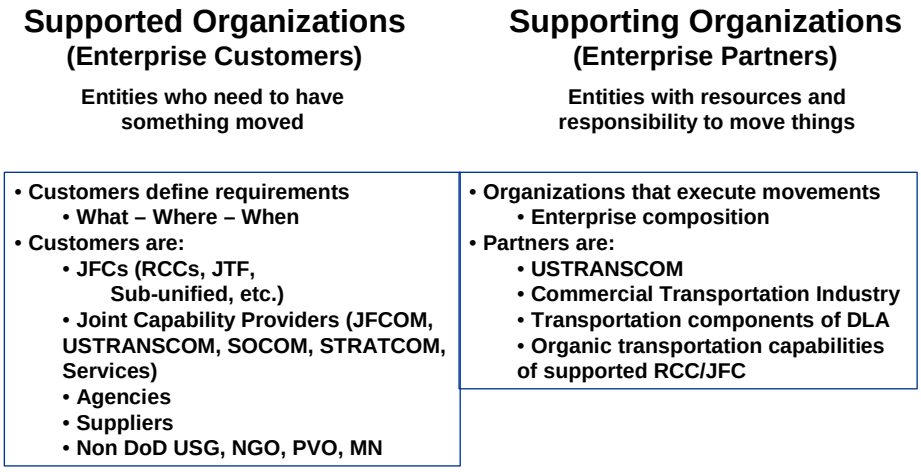
2. JDDE OVERVIEW

The JDDE is that complex of equipment, procedures, doctrine, leaders, technical connectivity, information, shared knowledge, organizations, facilities, training, and materiel necessary to conduct joint distribution operations. This appendix addresses organizations associated with the Enterprise, their relationships, their interfaces, and control of the Enterprise.

3. THE ENTERPRISE: RELATIONSHIPS AND COMPOSITION

The collaborative network of relationships of organizations within the Enterprise is critical to achieving the unity of purpose and unity of effort required to support the RCC/JFC. Within the Enterprise, these organizations operate under the construct of supporting and supported relationships. Brief descriptions of the roles and responsibilities of Enterprise organizations and stakeholders follow (See graphic depicting Enterprise composition and customers below.).

Enterprise Relationships & Composition



A. **<u>Supported Organizations</u>**. Supported Organizations are Enterprise customers. They are entities who need to have something moved and are as such "supported." They include:

(1) **Joint Force Commanders (JFCs)**. For purposes of this document, the RCC/JFC is the supported commander. In this Appendix, RCC/JFC will be used to identify Regional Combatant Commanders, Joint Task Force Commanders, Sub-unified Commanders, etc. The RCC/JFC identifies requirements and sets priorities for all Supporting Commanders and organizations within the theater or JOA. These prioritized requirements drive unity of effort across the Enterprise in support of the supported commander's requirements. The Enterprise will provide solutions to problems currently existing in the deployment and distribution processes by fusing seams in the current strategic and theater segments. The mission of the Enterprise is to execute global joint distribution operations in support of RCCs/JFCs. These operations focus on providing *for the movement or delivery of Joint forces and sustainment* from points of origin to points of need.

(2) **Joint Capability Providers**. Joint Capability Providers include JFCOM, USTRANSCOM, USSOCOM, USSTRATCOM, and the Services. They are major customers of the Enterprise. We will use JFCOM as an exemplar. The designated RCC/JFC is supported by JFCOM in its role as the global force provider. JFCOM, as a capability provider, coordinates with the supported RCC/JFC and the Services to source and make ready the Joint forces for handoff to the Enterprise. JFCOM is a supporting commander to the RCC/JFC, while a supported organization of the Enterprise. As stated below, this is the same relationship as DLA and the Services have with regard to sustainment.

(3) **Services**. The Services, through their Service Components, support the RCC/JFC under their Title 10 USC role to organize, train, and equip forces. Services, in coordination with JFCOM, prepare their forces for deployment and follow-on execution of RCC/JFC assigned

missions. As a customer of the Enterprise, non-self deploying Service forces are moved by the Enterprise. The Services have organic theater movement capabilities. As such, selected Service movement capability elements are contributing members of the Enterprise when directed by the RCC/JFC. The Services also have Title 10 USC responsibilities for logistics and provide sustainment functions in conjunction with DLA, and coordinate for direct vendor delivery of many commodities. They also contribute theater sustainment functions within their respective air, land, and maritime domains.

(4) **Defense Logistics Agency (DLA)**. Similar to the Services, DLA functions in support of the RCC/JFC by providing sustainment supplies to the JFC components. The Enterprise supports DLA in the movement of sustainment supplies from the designated point of origin to the point of need.

(5) **Non-DoD U.S. Government Organizations, Non-Governmental Organizations, Private Volunteer Organizations, Multi-National Organizations**. These organizations are also Enterprise customers, when approved through the Department of Defense, to access Enterprise movement support as required to accomplish the specified mission.

B. **Supporting Organizations**. Supporting Organizations, on the other hand, are Enterprise partners. They are entities with resources and responsibility to move things and are as such "supporting." They include:

(1) **U.S. Transportation Command**. USTRANSCOM, as the Defense Distribution Process Owner (DPO), coordinates and synchronizes the Enterprise by providing lift, transportation and ancillary distribution capabilities necessary to deliver force and sustainment capabilities to the supported RCC/JFC. USTRANSCOM is a supporting commander to the RCC/JFC and other Enterprise customers. In this capacity, USTRANSCOM leverages the Defense Transportation System and commercial transportation industry to execute movement of forces and sustainment.

USTRANSCOM performs another essential role in the Enterprise – it coordinates policy and sets standards for the JDDE, and synchronizes JDDE operations. As an example, USTRANSCOM currently establishes standards for packaging of materials for shipment aboard its carriers – sets dimensions for pallets, procedures for handling of hazardous material, and policies for shipping of weapons and ammunition. USTRANSCOM will set the parameters for distribution data standardization and systems configuration to provide Enterprise-wide E2E visibility. USTRANSCOM optimizes the effectiveness of the Enterprise, by coordinating and synchronizing distribution functions to meet Time Definite Delivery requirements of the RCC/JFC.

(2) **Components of the Joint Force**. The Services that constitute their respective components for land, air and sea have organic theater movement capabilities. As such, selected Service movement capability elements are contributing members of the Enterprise when directed by the RCC/JFC. The Services also have Title 10 USC responsibilities for logistics and provide sustainment functions in conjunction with DLA, and coordinate for direct vendor delivery of

many commodities. They also contribute theater sustainment functions within their respective air, land, and maritime domains

(3) **Defense Logistics Agency (DLA)**. As an essential member of the Enterprise, movement-related elements of DLA contribute to the movement of sustainment. DLA also plays a major role in the sourcing, packaging, and preparation of sustainment stocks and prepositioned material to be moved through the distribution pipeline. DLA also coordinates for direct vendor delivery of many commodities.

(4) **Commercial Transportation Industry**. Commercial transportation providers contribute a substantial capability to support distribution movement requirements. The wide range of options obtained through the commercial transportation industry are managed under USTRANSCOM as part of the total distribution process to ensure an integrated and synchronized effort to meet RCC/JFC requirements. Commercial Direct Vendor Delivery plays a significant role in sustaining the JFC and currently operates outside USTRANSCOM control. The Enterprise must gain visibility of these shipments to ensure they are integrated into the overall distribution effort and that their delivery meets RCC/JFC's requirements.

4. CONTROL

The Enterprise acts in response to requirements and priorities established by the supported RCC/JFC and other supported organizations. As such, coordination and synchronization of the actions of Enterprise organizations is paramount to the effectiveness of the Enterprise and management of the distribution pipeline. Effective control will be reflected in the unity of effort achieved throughout the Enterprise.

USTRANSCOM will coordinate and synchronize the Enterprise. In this capacity, USTRANSCOM will be responsible to monitor and discipline the performance of this global distribution network to ensure the flow of force movement and sustainment achieves the desired effect for the supported RCC/JFC. Enterprise control over the distribution system is defined as the ability to:

A. **Track movements**

B. **Monitor performance by**:

- Establishing performance standards
- Optimizing Enterprise performance
- Assessing performance

C. **Respond to requirements by**:

- Shifting
- Reconfiguring (per supported commander's intent) forces, equipment, and supplies
- Delivering tailored capabilities directly to the warfighter.

D. **Control also includes**:

- Planning, Allocating and Apportioning
- Scheduling and Routing
- Validating and Directing

Currently, the joint distribution pipeline is composed of three distinct segments. The first segment includes movement of unit forces, equipment, and supplies to the point of embarkation as well as movement of supplies from the vendor to the Defense Distribution Center and then to the point of embarkation. This segment is not under OPCON to USTRANSCOM. The strategic (outside the JOA) segment extends from the point of embarkation to a supported theater. USTRANSCOM exercises OPCON over Enterprise assets in the strategic segment. The last segment is the theater or operational (inside the JOA) segment, and extends from the theater debarkation points to the final destinations or points of need within the theater - designated by the RCC/JFC. USTRANSCOM provides capabilities that are OPCON to the RCC/JFC in support of his intra-theater distribution requirements. USTRANSCOM will coordinate supporting theater movement activities with the supported RCC/JFC.

OPCON of the theater distribution segment remains with the supported RCC/JFC. The unique aspects of theater distribution require that each supporting component commander (e.g., JFACC, JFLCC, and JFMCC) perform theater-unique distribution functions within their domain. The Enterprise will complement theater-unique capabilities and enable E2E visibility.

The current control relationship model between USTRANSCOM and operating forces of the Air Mobility Command (AMC) serves as an example of how control would be applied within the JOA. While USTRANSCOM exercises combatant command authority over AMC, it can relinquish OPCON of AMC forces to the designated air component commander for the purpose of enhancing delivery of sustainment to the theater. AMC Forces could be in the form of aircraft, mobility forces or Contingency Response Wing elements. In this model, scalable, deployable elements of the Enterprise that perform force movement and distribution tasks in support of the RCC/JFC would be under OPCON of the RCC/JFC. Specific command relationships may vary depending on the situation and would be at the discretion of the supported RCC/JFC.